

## A Teacher's Utilization Guide

Produced by WNEO/Channel 45 (Youngstown) \& WEAO/Channel 49 (Akron)
Funded through Project Equity

# A Teacher's Utilization Guide to Secrets of Sherlock (S.O.S.) 

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## Video:

Produced by:
WNEO/Channel 45 (Youngstown) \&
WEAO/Channel 49 (Akron)

## Featuring:

Tona Boyd as Mandy
Samantha's Gift of Grace CD as Sherlock
Owner \& trainer: Theresa Everett, Kyleewood Beagles, Canfield

## With:

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Calvin Stokes as Jericho
MaryJo Alexander as Quaker woman
Christopher Chen as Chinese man
Anil Bhardwaj as Indian man
Nathan Oliver as African man, Marrow of Tradition
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## Introduction

Welcome to the world of Sherlock! Secrets of Sherlock (S.O.S.) has been developed in response to the need for elementary teachers in northeast Ohio to prepare themselves and their students for the Fourth-Grade Proficiency Test. The goal of the series is to help meet the objectives of the proficiency test, not to teach the test.

We have concentrated on process more than content in our belief that this is a better way to prepare students for living in the 21st century. We have also focused on student learning rather than teaching. Educators have been aware for a long time that when students are engaged in active rather than passive learning, retention is much improved. The processes contained within these materials are designed to encourage divergent thinking.

Project-based education is a viable way to insure student involvement. The best way to learn is by doing not a new concept! The S.O.S. planning team has worked hard to provide a realistic and natural integration of the curricular areas.

Take advantage of opportunities within the programs to engage your students in multicultural issues. Some activities are included within, but we hope teachers will add to and refine other related activities to complement the programs.

As professional staff developers at Channels $45 / 49$, we want to provide ongoing support and communication with teachers. This, too, is a process. As you progress through the series and activities, please share your successes and problems with us. Incorporate things you already do, and add, add, add to this. If it isn't working, you are not alone. Call us!

## How to communicate with us

via Learning Link: letter to Sherlock
via telephone: 216-677-4549, ask for Sheila
via U.S. mail ("snail mail"): Channels 45/49, P.O. Box 5191, Kent, OH 44240-5191, attn: Sheila

## Cooperative Learning Techniques

Research strongly supports the success of cooperative methods to increase the academic and social achievements of students. Cooperative learning is a critical tool for the classroom of today and of the future. We have provided activities and techniques that even novices in cooperative learning can try. Inside, you will find many materials available to help the classroom teacher incorporate the cooperative method in the classroom. This teacher's guide is designed to encourage the use of cooperative techniques, not to replace cooperative learning training. Look at our bibliography (classroom-tested and provided by local classroom teachers to get you started). Then research for yourself, and let us know what does and doesn't work for you.

## Points to consider when implementing the cooperative activities

1. Keep teams together for all activities for each entire unit. Create new teams for each program unit.
2. Four team members are best - this allows for an easy break into pairs, then back to the larger four. If four is not possible, go to groups of five rather than three.
3. Cycle of instruction:
a. Teaching (still essential in the learning process)
b. Team work (takes many different forms, depending on the needs of the task)
c. Individual accountability (please do NOT give group grades)
d. Team recognition (all team members receive: score, feedback, benefit to group)
4. Getting team members to care about each others' success will not occur naturally. The teacher must set this as a priority. The structure of the tasks here is designed to encourage a cooperative attitude within the groups, but the teacher must instill the concept that the success of the group depends on the learning of all individuals within the group. Each member's input must be valued.
5. Cooperative learning is NOT happening if:

- the "work" is being completed by one or two members of the group and then shared with the rest.
- students perceive that finishing the "task" is more important than the learning involved with completing the task.
- the teacher is working more than the students.
- NO ONE is having fun! (Contrary to the belief of many, learning can and should be FUN.)


## Caution

If you are new to cooperative education, take it slow. It takes practice and time for the lessons to go smoothly.

## Resources for Cooperative Learning

- Cooperative Learning, by Spencer Kagan, Resources for Teachers, Inc., 1992

Excellent 200+ page resource of easy-to-read, but detailed philosophy along with ready-to-use classroom activities. A must-have for the beginner as well as the experienced teacher.

- The Cooperative Think Tank, by James Bellanca, 1990

Cooperative methods to help students organize and learn information are presented.

- Cooperative Learning, Cooperative Lives, by Nancy Schneidewind and Ellen Davidson, 1987 Good philosophical background.


## Resources for Cooperative Learning (con't)

- The First Four Weeks of Cooperative Learning, by Teresa L. Cantlon, 1991

A resource for the beginner.

- Cooperative Learning and Mathematics, by Beth Andrini, 1993

This book provides a multi-structural approach to teaching math concepts, including detailed cooperative learning structures illustrated by ready-to-use activities for the classroom.

- Literacy: Helping Children Construct Meaning, by J. David Cooper, 1993

Great resource for the novice as well as the seasoned teacher when tackling the complexities of using whole language strategies. Practical activities are supported by current research.

- Cooperative Learning Teacher Timesavers, by Imogene Forte, 1993

This publication is an introduction to cooperative learning. It contains ideas for projects and teaching aids.

- Read! Write! Publish!: Making Books in the Classroom, by Barbara Fairfax and Adela Garcia, 1992 This book features step-by-step instructions for making 20 different student-generated books.
- Invitations: Changing as Teachers and Learners K-12, by Regie Routman, 1991

A thorough resource for the teacher interested in using whole language strategies. Journal writing, integration, collaboration, and additional resources are described.

- Group Solutions: Cooperative Logic Activities, by Jan M. Goodman, GEMS, 1994

A brief description of the philosophy and recommended procedures precedes a hefty supply of blackline, ready-to-use activities for grades K-4. Students become cooperatively active in problems relating map skills, money, time, science, and many other exercises supported by the Lawrence Hall of Science.

- Contact your local cooperative learning association. Ours is The Ohio Association for the Study of Cooperation in Education, Ashland University Program Center in Columbus, 1900 E. Dublin-Granville Road, Columbus, OH 43229.


## Using a Journal (Log Book)

To increase the usefulness of S.O.S., we recommend that students regularly use a journal. (We are calling this one an S.O.S. Tracker Log Book to relate it to the programs.) Current research supports the use of a journal or log showing that student fluency and writing skills are increased by process writing. Retention of facts is also increased when students can make reflections on their experiences. Reading and writing tie the learning experience together and allow the student to construct personal meaning.

Established procedures and purposes of journal keeping vary greatly. This activity is not intended as training in journal writing. Instead, the journal will help students understand the problem-solving process. A variety of writing exercises is provided here to guide them through different strategies.

We recommend the use of a journal (log book) throughout the school year. Students can respond to our suggestions, or the teacher can create her/his own activities.

If purchasing prepared journals is too costly, your students can make their own S.O.S. Tracker Log Books. For each book take approximately 20 pieces of newsprint or manila paper, fold in half, fold a construction paper cover over the pages, and staple. Add an S.O.S. sticker to the cover page.


For the most effective use of the S.O.S. Tracker Log Book, follow this advice: Keep it short! Keep it fun!

## General Techniques

## 1. Brainstorming

Brainstorming is a technique to get people to open up and generate ideas. The team generates ideas at random and offers as many ideas as possible. In a large group, the teacher should record the ideas to allow all students the freedom to brainstorm. In small groups, team members should rotate the responsibility of recording ideas every five minutes or so.

## Brainstorming Rules

- No idea is dumb.
- All ideas are needed.
- All ideas are recorded (briefly — use key words, not whole sentences).
- Each person should contribute (and be encouraged to do so).
- Let ideas generate other ideas.
- Don't go into great depth explaining ideas; deal in simple thoughts.
- No one can decide which ideas are good or bad during a brainstorming session.
- Work fast to generate ideas.


## 2. Tallying to record numerical responses

Teach students to tally appropriately:
When counting responses (or whatever), put a tally mark for every item counted.
A tally mark looks like this:
After every fourth tally mark, put the fifth tally mark diagonally across the first four.
A group of five tally marks looks like this:


Continue with groups of five marks until all counting is over. You can then easily count the tallies by fives.

## 3. Consensus vs. voting

## Vote

A vote is a formal expression of preference. By casting a vote for a proposed resolution of an issue, a person does not guarantee his/her support for the majority decision.

## Consensus

Consensus is determined by a collective opinion or accord. The group agrees to support the decision and to work with the group's decision.

## Final Activity

Conduct a survey in your classroom to find out which episode of S.O.S. was the favorite. Students can create a survey form and conduct the survey within the classroom. Create a bar graph below to show how many votes each show received. Please send the graph to Sherlock at Channels 45/49, P.O. Box 5191, Kent, OH 44240-5191. Thanks!

Teacher's Name $\qquad$

Grade $\qquad$ School $\qquad$
District $\qquad$

# Program 1: Travel Tracks 



# PROGRAM 1: TRAVEL TRACKS 

## Content Area

- Citizenship


## Synopsis

Sherlock decides to take a trip around the world. Mandy does not get his note, and, therefore, thinks she has lost her dog. Mandy becomes vaguely aware of Sherlock's whereabouts from the media, but still has no idea where he is. She appeals to the audience ("S.O.S. Trackers") to find the missing dog.

## Tasks

Small groups use video and other provided clues to locate Sherlock, and then write to Mandy to tell her where Sherlock is. To help Sherlock advocate world peace, individuals create a "World Stamp."

## Overall Procedure

1. View video.
2. Examine clues.
3. Complete a series of puzzles to determine the cities Sherlock visited.
4. Conclude Sherlock's whereabouts.
5. Communicate the whereabouts to Mandy via Learning Link (see telecommunications).
6. Create a "World Peace" stamp in response to Sherlock's request.

## Specific Objectives

## Math

- Identify needed information to solve a problem.
- Explain or illustrate why a solution is correct.
- Make or use a table to record and sort information and make identifications, comparisons and predictions from tables, picture graphs, bar graphs and labeled picture maps.


## Citizenship

- Demonstrate map skills by a) identifying selected major references on the earth; b) locating major land forms and bodies of water; and $\mathbf{c}$ ) using a number/letter grid system to locate places on a map, a map key to understand map symbols, a linear scale to measure distances or a map and a direction indicator.
- Use maps and diagrams as a source of information to a) recognize continents by their outlines and major physical features; b) recognize characteristics of major land forms and bodies of water; $\mathbf{c}$ ) describe the physical differences between places; or d) explain the influence of the natural environment on the settlement of Ohio and on changes in population patterns, transportation and land use.
- Identify or describe the location of Ohio in relation to other states, to regions of the United States and to major physical features of North America.


## Reading

- Choose materials related to purposes, as evidenced in part by the capacity to a) choose or identify library resources $\mathbf{b}$ ) select fiction or nonfiction materials in response to a topic or theme and $\mathbf{c}$ ) choose appropriate resources and materials to solve problems and make decisions.


## Telecommunications

## Stump Other Classes

Here's an opportunity for your students to interact with their peers in other schools. After discovering the exotic lands around the world, students will want to share their findings. Have each group writes a question about a city or country they researched. As a class, select the best or hardest question and post it online for other classes to answer.

Be sure to read and see if you can answer the other classes' questions. On Learning Link, go to the discussion area and post your response on the bulletin board. If you want to do more, you can send e-mail directly to Sherlock from the mail area.

## Extensions

Making postcards in class is a fun way for students to learn about other countries. Use blacklines of continent outline maps for students to locate a new vacation spot on a continent Sherlock has not yet visited. Students research various countries on the continents, choose a location on a continent that Sherlock did not visit, and then create a postcard from that place. The postcard should show something about the area that Sherlock would really like. Have your students send it to him. (We all know how much Sherlock loves to send postcards. He likes to get them, too. Send postcards to Sherlock, clo Channels 45/49, P.O. Box 5191, Kent, OH 44240-5191. If you draw the postcard to the correct size on tag board, it can be sent through the mail.)

## - Stamps

If your students would like to submit a stamp design for consideration, they can send their suggestions to:

Washington, D.C. 20260

## Possible S.O.S. Tracker Log Book Activities

## Activity A

Use the "What I know..." form (page 5), or have students draw the lines and add the headings to a page in their S.O.S. Tracker Log Book. (This form enables students to document and organize information.)

## Procedure

1. As a whole class, students view the first S.O.S. program.
2. Have students brainstorm individually on what they think they know about cities, countries and continents in relation to what they saw on the video and write what they know about those things on their own sheets (or in their S.O.S. Tracker Log Books).
3. The whole class then shares ideas on what they know.
4. Have students brainstorm individually on what they want to know about cities, countries and continents and write those things on their own sheets (or in their S.O.S. Tracker Log Books).
5. The whole class then shares ideas on what they want to know.
6. At the conclusion of all activities for the show, bring out the forms.
7. Have students brainstorm individually on what they learned about cities, countries and continents and write those things on their own sheet (or in their S.O.S. Tracker Log Books).
8. The whole group then shares ideas on what they learned.

## Activity B

Students write a short follow-up story in the style of a newspaper article about the happy reunion of Sherlock and Mandy.


# Directions for Finding Sherlock 

## Before viewing the program ...

1. Duplicate the clues (pages 9-39) for the teams to analyze.
2. Prepare the clues for distribution to the teams (see below).

## View the program, and then ...

3. Divide the class into teams of four. If your class does not divide evenly, extra students can be added to other groups to make teams of five. The teams will be together for all activities during this program.
4. Present the large envelope with the letter from Mandy (page 12). Create mystery and excitement about the clues.
5. All teams work to decipher the clues to determine the cities that Sherlock visited.
6. The teams share with each other until all teams agree on the seven cities.
7. Using a classroom world map, the whole class places push pins on each city Sherlock visited. Determine the latitude and longitude of each city. Use this opportunity to practice the map and geography skills.
8. Teams reassemble to analyze the final sequencing clue to conclude where Sherlock is now. (Don't give this clue until all cities have been determined.)

## After submitting the results to Mandy ...

9. Read aloud the letter from Sherlock (page 39) asking kids all over the world to design a really cool stamp that would reflect friendship, world unity and peace.
10. Students draw the rough draft. Use the stamp design sheet (page 39) or your own on which to draw the final copy.
11. If desired, send stamp designs to the U.S. Postal Service for consideration. (The address is listed on page 4)

## Overall Directions

## Materials

- A current world atlas would be very helpful
- Eight sets of clues (pages 9-39) with Mandy's first letter (page 12) (one for each team)
- The "Team Record of Cities" sheet (page 11) (one for each team)
- Mandy's letter with the logic problem (page 24) that identifies Sherlock's final location (one for each team), to be handed out to the teams when all teams have completed all clues
- Sherlock's letter (page 39), to be given to the class after the results have been sent to Mandy

1. Prepare the hands-on clues, following the directions below. You will want to label each clue so that students do them in the correct sequence. Student directions should be duplicated, then cut apart and glued to team envelopes. Here's one possible way to organize the clues for each team (smaller envelopes go into larger one).

One $6 x 9$ envelope per team, for each of seven clues (directions attached)


One $9 \times 12$ envelope per team
(Team Record of Cities sheet attached)


## Overall directions (con't)

2. Form your class into teams of four. (If they do not evenly divide into fours, the extras can be added to teams of four to make teams of five.)
3. Each team receives the clues, one at a time. As the teams complete each clue, they return the envelope to the teacher, record their answer on the Team Record of Cities, and receive the next clue. The teams continue until all clues have been completed. (NOTE: Not all information is given, so classroom atlases, maps, and other reference materials should be made available.)
4. As a whole class, students compare their results and revise conclusions as needed until all teams agree on all seven cities.
5. As the cities are located, stick plastic push pins on a large map in the cities Sherlock visited. Determine the latitude and longitude of the cities. Identify the countries the cities are in. Use this visual reference for your normal direction, mileage, time zone, etc. activities.
6. After all teams have completed all clues and recorded the cities, give each team the final logic clue (page 37) that will determine the actual sequence of cities that Sherlock visited. Have the teams compare results.
7. Have each team collaborate to create a paragraph that describes the process they followed to find Sherlock. Assemble the entire class to compare their experiences.
8. Write a classroom note to Mandy about where Sherlock is and how you found him. Send the message to Sherlock on Learning Link. Or by mail.
9. Share the letter from Sherlock (page 39) with the whole class. Encourage stamp designs.

## Teacher directions for Clue \# 1

1. Reproduce the flags and clue cards (pages 13-14) so that every team of four students will have a set.
2. Using the key below, color the flags and then cut them apart.
3. Put the pieces in an envelope. (One set of flags, one set of clues per envelope.)
4. Duplicate or write the student directions on each envelope.
5. Put the envelope into a larger envelope that has the S.O.S. logo glued to the front.

| Bangladesh <br> green <br> red | Bahrain <br> red |  |  | Japan <br> white <br> red |
| :---: | :---: | :---: | :---: | :---: |
| Indonesia <br> red <br> white |  | Qata <br> purple |  | Gabon green yellow blue |
| Somalia <br> blue | green | white | green | Libya <br> green |

## Teacher directions for Clue \# 2

1. Prepare clue envelopes to include Sherlock's Secret Code Grid (page 15) and a set of secret code clues A through D (pages 16-19) for each team.
2. Put the pieces in an envelope.
3. Duplicate or write the student directions on each envelope.
4. Put the envelope into a larger envelope with the other clues.

## Teacher directions for Clue \# 3

1. Duplicate the brochures (page 20) (one for each team), clue strips (pages 21-22) (cut apart so that each student gets one strip) and clue record sheet (page 23) (one for each team).
2. Place the pieces in envelopes (one for each team).
3. Duplicate or write the student directions on each envelope.
4. Put the envelope into a larger envelope with the other clues.

## Teacher directions for Clue \# 4

1. Duplicate Mandy's clue \#4 (page 24), the clue cards and the clue picture back-to-back (pages 25-26), one set for each team. Cut the clue cards apart. (Do not let students do the cutting, as the pieces are in the correct order, and there would be no need to solve the puzzle.)
2. Place the pieces in envelopes and write the student directions on the envelopes.
3. Add to the larger envelope.

## Teacher directions for Clue \# 5

1. Duplicate the Morse code sheets (pages 27-30), one set per group.
2. Place the pieces in envelopes (one for each team).
3. Duplicate or write the student directions on each envelope.
4. Put the envelope into a larger envelope with the other clues.

## Teacher directions for Clue \# 6

1. Duplicate the clue sheet (page 31), one per student. Place the sheets in envelopes, one per group.
2. Duplicate or write the student directions on each envelope.
3. Put the envelope into a larger envelope with the other clues.

## Teacher directions for Clue \# 7

1. Duplicate the telephone code sheets (pages 33-36) (one per team) and cut the clues apart.
2. Duplicate the telephone dials (page 32) (one per pair of students) and cut them apart.
3. Place the parts in envelopes, one per team.
4. Put the envelopes into a larger envelope with the other clues.

Place the letter to S.O.S. Trackers from Mandy (page 12) in the large envelope.

## Final Clue

When all groups have determined all seven cities, duplicate the final letter from Mandy (page 37), one for each group. Also duplicate the postcards (page 38), one set for each group. Distribute clues and have students solve for Sherlock's location.

## Student directions for Clue \# 1

1. Place the flag cards on the table for all to see
2. Each team member takes one clue card at a time until they are gone.
3. You are the only one who can look at your cards, but you should read them to the team.
4. Use the clues to decide what country and city Sherlock visited. Move the flags to help.
5. Write the information on your team's Record of Cities Sheet.

## Student directions for Clue \# 2

1. To read the code: To find out what letter " 7,14 " is, count over seven spaces on the grid, and then up 14 spaces. The letter at the intersection is $z$. Write the letter you find on the blank below the code. Continue with the other letters in the same way.
2. Each team member takes one clue sheet and deciphers it.
3. All team members share the information discovered.
4. Write the information on your team's Record of Cities Sheet.

## Student directions for Clue \# 3

1. Each team member takes one clue strip. All members share the brochure sheet.
2. Team members take turns reading the clues from the brochures.
3. After each clue is read, each team member looks at his/her clue strip.
4. If information there leads the group to think Sherlock visited that city, a key word from that clue should be written in the "yes" column on the Clue Record Sheet under that city's name.
5. If information there leads the group to think Sherlock did NOT visit that city, a key word from that clue should be written in the "no" column on the Clue Record Sheet under that city's name.
6. Continue until all information on the brochures has been read. Try not to make conclusions until all the clues have been read. (If a clue doesn't make sense, leave it off.)
7. Use the collected clues on the Clue Record Sheet to decide which city Sherlock visited and write the information on the Record of Cities Sheet.

## Student directions for Clue \# 4

1. Take turns reading all the clues.
2. Place the puzzle pieces with the room side up.
3. Using the clues, move the rooms around as the clues are read.
4. After the rooms are in the correct order, tape the pieces together and turn over the pieces to see the picture.
5. Use the clue found here to find the city.
6. Write the information on your team's Record of Cities Sheet.

## Student directions for Clue \# 5

1. Work in pairs within your group to solve each clue.
2. To read the code: $\varepsilon=-$ (dash), and ${ }^{\circ \circ}=\bullet$ (dot) in the Morse code. An "X" comes between letters (in Morse code many letters are made from more than one dot or dash), and "XX" comes between words.
3. When you have solved all the clues, write the information on your team's Record of Cities Sheet.

## Student directions for Clue \# 6

1. Using your inch ruler, measure to the nearest inch between cities, beginning at Start.
2. Use the map scale to figure the mileage, and write the distance in miles on each dotted line.
3. The last city Sherlock visited in India is the answer to your clue.
4. Write the information on your team's Record of Cities Sheet.

## Student directions for Clue \# 7

1. Work in pairs within your group to solve each clue.
2. To read the code: each number on the phone dial has three letters on it (except 1 and 0 .) To determine which letter it is, look at the sign above the number - for example, $\frac{1}{2}$ means the letter "b", but 2 means the letter "a".
3. After each member solves his/her clue, all team members share the information discovered.
4. Write the information on your team's Record of Cities Sheet.

## Team Record of Cities Sherlock Visited

(one per team)

Team: $\qquad$

Clue \#1
City $\qquad$ Country $\qquad$ Latitude \& Longitude $\qquad$

Clue \#2
City $\qquad$ Country $\qquad$ Latitude \& Longitude $\qquad$

Clue \#3
City $\qquad$ Country $\qquad$ Latitude \& Longitude $\qquad$

Clue \#4
City $\qquad$ Country $\qquad$ Latitude \& Longitude $\qquad$

Clue \#5
City $\qquad$ Country $\qquad$ Latitude \& Longitude $\qquad$

Clue \#6
City $\qquad$ Country $\qquad$ Latitude \& Longitude $\qquad$

Clue \#7
City $\qquad$ Country $\qquad$ Latitude \& Longitude $\qquad$

Student Names: $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Dear Trackers,
Thank you so much for agreeing to help me find Sherlock! I have a feeling that he is OK, but I need to know for sure. I will really be grateful if you can help me!

I am sending these clues. I know the answer is in here, but I can't seem to make sense of it all. This is how I got them:

Clue \#1 - Sherlock sent a postcard with these flags on it to his cousin. He said that although he likes all the flags, he was only able to visit one of those countries.
Clue \#2 - I found this code waiting on my computer. Someone saw the newscast that reported I was looking for Sherlock and sent me this message from Sherlock.
Clue \#3 - These brochures fell out of Sherlock's suitcase in one of the cities. A friendly hot dog street vendor sent them to me. The strips of information about Sherlock are just notes I have kept in my journal. I thought they might help.
Clue \#4 - Sherlock sent his cousin this photo of himself on the trip, but it got all cut up. It looks like his plans for his new doghouse on the back. I have sent along the details of how he wants his new house, in case that helps.
Clue \#5 - A ship's captain sent me these messages he got from Sherlock. I think it's Sherlock's version of the Morse code.
Clue \#6 - I know that Sherlock traveled through three cities in India, because he has relatives in all of these cities. But he only had time to really visit one city. It was the last one he visited.
Clue \#7 - I know Sherlock tried to contact me by phone, because I got this phone clue that was sent to me by a very nice girl who was in the phone booth right after Sherlock.

It looks like Sherlock visited seven different cities around the world. I would be really happy for him, if I just weren't so worried about him! I am really counting on your help. I can't thank you enough!
Clue \# 1

| The flag of the country that <br> Sherlock visited has two colors. | The flag of the country that <br> Sherlock visited has no blue in it. | The flag of the country that <br> Sherlock visited has two <br> separate color areas. |
| :--- | :--- | :--- |
| One of the colors in the flag <br> of the country that Sherlock <br> visited was white. | The flag of the country <br> that Sherlock visited is not <br> in Africa, but the city he visited <br> is the capital city of the country <br> he visited. | The flag of the country that <br> Sherlock visited has no <br> curved lines. |

Flags


## Sherlock's Secret Code Grid

(Clue \#2)


Sherlock's Secret Code Grid Clue \#2A - Figure this one out:
$(1,11)(9,2)(5,7)>(2,9)(10,15)(1,11)(12,17)(10,15)>$


$(2,9)(4,17)(2,1)>(12,17)(12,5)(8,16)>(8,6)(10,15)(2,1)(7,8)>$

$(1,11)(9,2)(10,15)(3,19)>(2,9)(10,15)(1,11)(12,17)>(12,5)(2,1)>$


Sherlock's Secret Code Grid Clue \#2B - Figure this one out:


Sherlock's Secret Code Grid Clue \#2C - Figure this one out:
$(10,15)(1,11)>(10,15)(3,19)>$

$>$

$\qquad$ $>$
$(2,9)(6,10)(12,5)(3,19)(5,7)>(1,11)(12,5)>(1,11)(9,2)(5,7)>$

$(2,9)(4,17)(2,1)>(12,17)(12,5)(8,16)>(8,6)(10,15)(2,1)(7,8)>$

$\qquad$ $>$ $\qquad$ > $\qquad$
$\qquad$
$\qquad$
$\qquad$ .

Sherlock's Secret Code Grid Clue \#2D - Figure this one out:

$(2,9)(4,17)(2,1)>(12,17)(12,5)(8,16)>(8,6)(10,15)(2,1)(7,8)>$

$$
\begin{aligned}
& -\sim-\sim \sim \sim \\
& (4,17)>(7,18)(4,17)(14,14) ?>(10,15)(1,11)> \\
& >-\quad ?> \\
& (7,18)(10,15)(4,3)(9,2)(1,11)>(5,13)(5,7)>(9,2)(4,17)(11,4)(7,8) .
\end{aligned}
$$

$\qquad$ $>$ $\qquad$ $>$ $\qquad$
$\qquad$
$\qquad$ -.

# Canton 



Locally this city is known as Guangzhou.

Guangzhou is the largest city in southern China.

\# Visit the zoo, the sports stadium, or the pleasant public parks.

If you visit during the spring or fall, you can visit the Export 0 Commodities Fair.

## Tokyo



Enjoy the beautiful cherry and lotus trees in Ueno Park.

Tokyo boasts more neon signs than any other city in the world.


## Shanghai



Shanghai is the largest city in China.

It is China's leading port. You can find many interesting shipyards and wharves here.

Visit tall skyscrapers, public gardens, stores, restaurants, and the exciting sports center.

You can treat yourself to a tasty roasted sweet potato sold by a street vendor.


## Beijing



Beijing is the capital and second largest city in China.

It is also known as Peking.


Be sure not to miss the
Forbidden City where China's emperor used to live.
ユ
Clue \#3: Clue Sheet 3A

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Sherlock likes <br> to watch <br> sports events. | Sherlock eats <br> a dog biscuit <br> every day. | Sherlock <br> sailed on a <br> ship. | Cherry blossoms <br> make Sherlock <br> sneeze. | Sherlock really <br> loves being <br> outdoors. |

Sherlock likes
to watch
sports events.

Clue \#3: Clue Sheet 3C

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Sherlock likes <br> sunny days | Bright lights <br> hurt Sherlock's <br> eyes, so he <br> avoids them. | Sherlock doesn't <br> go where he is <br> forbidden. | Sherlock <br> never turns <br> down a chance <br> to go fishing. | Loud noises <br> scare Sherlock. |

p


Program 1: Travel Tracks

Clue \#3 Record Sheet

| yes |  |
| :--- | :---: |
| yonton |  |
|  |  |


| Nhanorain |  |
| :---: | :---: |
| yes |  |
|  |  |



## Dear Trackers,

I wrote these notes about how Sherlock wants his new doghouse. I hope it helps!

## Sincerely,

## Mandy

## Clue \#4



1. Sherlock wants the living room to be in the center, front of the house, which faces south.
2. He wants his meeting room to adjoin the living room, so that when he and his friends and co-workers need to be more comfortable they won't have to go too far.
3. I overheard Sherlock telling the builder that he wants the hot tub to be in the front of the house, with big bay windows on the south side of the house.
4. The kitchen should be in the center of the house, so that he is never too far from his munchies.
5. The hot tub should be as far from the master bedroom as possible. He knows the bubbling and gurgling from the tub would keep him up all night. And he loves his beauty sleep.
6. Sherlock decided that he does not want the bathroom next to the meeting room, because he thinks everyone would be running off to the bathroom all the time, instead of paying attention to the meeting.
7. Sherlock thinks the sun room should be on the east side of the house to get the morning sun. He also wants the sun room to be between the guest bedroom and the hot tub.


## Clue \#5-A

Sherlock left this morse code clue. Where did he go?
(write the letter above the code.)


Write the sentence here:
$\qquad$

Morse Code Key: $\mathbb{E}=-$ and ${ }^{\circ \circ \circ}=\cdot$

| A - - | G - - • | N-• | U.•- |
| :---: | :---: | :---: | :---: |
| B - $\cdot \cdot \cdot$ | H.0.• | $\mathrm{O}-\mathrm{-}$ | V.0. - |
| C-•-• | $1 \cdot \bullet$ | $\mathrm{P} \cdot$ - - | W•-- |
| D-•• | J.- - | Q- - - | X-••- |
| E. | K- - | R•-• | Y - $\cdot$ - |
| F••-• | L•-•• | S.0. | Z--•• |
|  | M - - | T - |  |

## Clue \#5-B

Sherlock left this morse code clue. Where did he go?
(write the letter above the code.)


Write the sentence here:
$\qquad$
Morse Code Key: $\mathbb{B}=-$ and ${ }^{\circ \circ}=$

| A. - | $\mathrm{G}-\mathrm{-}$. | N - | U••- |
| :---: | :---: | :---: | :---: |
| B-... | H.... | $\mathrm{O}-$ - - | V... - |
| C- $\cdot$ - | \|-• | P. - - | W. - - |
| D-•• | J. - - - | Q-- - | X-•• |
| E. | K- - | R•-• | Y - •-- |
| F.•-• | L•-•• | S... | Z--•• |
|  | M - - | T- |  |

## Clue \#5-C

Sherlock left this morse code clue. Where did he go? (write the letter above the code.)


Write the sentence here:

— - - - - - - .
Morse Code Key: $\mathbb{Z}=-\quad$ and ${ }^{\circ \circ}{ }^{\circ}=\cdot$

| A. - | G--. | N - $\cdot$ | U.•- |
| :---: | :---: | :---: | :---: |
| B - . ${ }^{\text {a }}$ | H.... | O--- | V... - |
| C- $\cdot$ - | \|•• | P.- - | W•-- |
| D-•• | J. - - | Q- - - | X-••- |
| E. | K-•- | R.-- | $\mathrm{Y}-$ - - |
| F-•-• | L•-•• | S... | Z - - •• |

## Clue \#5-D

Sherlock left this morse code clue. Where did he go? (write the letter above the code.)


Write the sentence here:


Morse Code Key: $\mathbb{C -}=-$ and ${ }^{\circ \circ}=\cdot$

| A - | G--. | N-• | U.•- |
| :---: | :---: | :---: | :---: |
| B - ... | H.... | O--- | V...- |
| C-•-. | \|-• | P. - - | W. - - |
| D-•• | J. - - - | Q- - - | X-••- |
| E. | K-•- | R•-• | Y - •- |
| F-•-• | L•-•• | S... | Z--* |
|  | M - | T- |  |



Program 1: Travel Tracks

## Clue \#7

Use this phone dial to decipher the clue.


## Telephone Code Clue \#7 A left behind by Sherlock

Write the letter below the code.




-     - _ - - - _ _ - _!

Telephone Code Clue \#7B left behind by Sherlock
Write the letter below the code.


| 8 | 4 | 7 | - | 8 | 8 | 8 | 1 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 7 | 1 | 2, | 4 | 7 | 2 | 7 | 7 | 1 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |




## Telephone Code Clue \#7C left behind by Sherlock

Write the letter below the code.
$\begin{array}{llllllll} \\ \text { C. } 8 & 8 & 1 & 3\end{array} \quad \begin{array}{llllll} & 2 & 4 & 8 & 9 & \\ 4\end{array}$

$-\ldots-\ldots-\ldots$.

Telephone Code Clue \#7D left behind by Sherlock

Write the letter below the code.
D. $\begin{array}{ll}1 & \text { - }\end{array}$
$\begin{array}{lll}1 & \text { 亿 } \\ 6 & 6 & 9\end{array}$


| 1 | 1 |  |  |
| :--- | :--- | :--- | :--- |
| 5 | 6 | 6 | 9 |

$\begin{array}{llllllllllllll}\text { 亿 } & 8 & 2 & 2 & 2 & 8 & 4 & 6 & 1 & 1 & & & \text { - } \\ 4 & 8 & 6 & 3 & 3 & 4 & 6\end{array}$

\[

\]

$$
-----\quad-\quad-\quad-
$$

Dear Trackers,
How is it going? Have you made sense of the clues yet? I think these new clues might help. I got a set of postcards from Sherlock they all arrived on the same day. I guess he's on vacation, all right!

I am still not sure where he is right now. I need to send him a ticket to get home. I have the address, but I don't know what city he ended up in. I looked at all the postmarks on the postcards, and I wrote down these clues:

1. The postcard from India was sent exactly in the middle of all the postcards.
2. Sherlock visited California first.
3. In China, Sherlock visited two cities before going to another country.
4. The beautiful picture postcard from Africa was sent before the card from Sri Lanka, but after the one from India.
5. Sherlock's arrival in China was shown in the delightful postcard from Shanghai.
6. The postcard from Sri Lanka was sent before the one from Qatar, but after the card sent from India.

Can you tell me the order he visited the cities in and where he is now? Once again, I owe you! Thanks!

Sincerely,

Mandy

Cities: (cut apart the boxes and move them around according to the clues.)


San Francisco


Addis Ababa


## Hohhot

Dear Trackers,
Thank you so much for tracking me down for Mandy. I thought I should tell her where I was, but I didn't know she would be that worried. Anyway, when you let her know that $I$ was safe and where she could find me, Mandy was very relieved. She isn't even mad at me anymore.

I really did enjoy my vacation around the world, though - the people are all so nice! All those different foods were a real blast. And there were really cool postcards to send from each place! And I LOVE to send postcards.

I was thinking on my long trip how neat it would be if I could design a world peace stamp... but $I$ just don't seem to be able to hold a crayon or marker in my paw very well. Since I know how concerned you S.O.S. Trackers are about the world, I was wondering if $I$ could ask you one more favor.

Would all of you make a new stamp that represents world peace? I am enclosing an outline that might help you get started. Thanks! And let me know how you're doing.

Doggedly Yours,

Sherlock


# Program 2: Food Is My Life 



# PROGRAM 2: FOOD IS MY LIFE 

## Content Areas

- Math
- Reading
- Writing


## Synopsis

Sherlock has written a book that no one will buy. He is interviewed by a local morning talk show host and laments that he doesn't understand why no one is buying his book. He asks students what type of book he should try writing next.

## Tasks

Conduct a survey (within the classroom and/or electronically), vote for favorite books, and analyze data collected by survey; then recommend to Sherlock the type of book he should write.

## Overall Procedure

1. Whole class views the program off air or on videotape.
2. Groups of four predict results for each question, compare to class predictions.
3. Conduct the survey.
4. Record the results within the classroom.
5. Summarize the results, compare with predictions.
6. Do the telecommunications activity.

## Specific Objectives

## Math

- Make or use a table to record and sort information and make identifications, comparisons and predictions from tables, picture graphs, bar graphs and labeled picture maps.


## Reading

- Use graphic aids or illustrations to locate or interpret information.
- Identify and interpret vocabulary (words, phrases, or expressions), critical to understanding the text.


## Telecommunications

## Share Your Vote

Write one paragraph from your entire class that makes a recommendation to Sherlock and shares the title of the winning book for their class. The winning title will be announced online and on the air.

On Learning Link, go to the discussion area and post your response on the bulletin board. If you want to do more, you can send e-mail directly to Sherlock from the mail area.

## Extensions

Provide an authentic audience for your students' writing by having them submit their stories to magazines that print student work:

- The Acorn, 1530 7th Street, Rock Island, IL 61201 - 50 percent student work
- Boodle, P.O. 1049, Portland, IN 47371 - 95 percent student work
- Stone Soup, The Magazine By Children, Children's Art Foundation, P.O. Box 83, Santa Cruz, CA 95063 - 100 percent student work
- Thumbprints, 928 Gibbs Street, Caro, MI 48723 - Newsletter
- Whole Notes, P.O. Box 1374, Las Cruces, NM 88004 - poetry only
- Wombat: A Journal of Young People's Writing and Arts, 365 Ashton Drive, Athens, GA 30606 95 percent student work
- The Writer's Slate, P.O. Box 664, Ottawa, KS 66067 - 90 percent student work

For more detailed information on each publication and submission hints: Children's Writer's and Illustrator's Market, ed. by Christine Martin, 1994

## Possible S.O.S. Tracker Log Book Activities

## Activity A

At the conclusion of the activities for this program, the students write a record of the process followed to prepare them to make a recommendation to Sherlock. The report should be only one paragraph and should include these things:

## Directions to students

1. Describe the process the group followed.
2. Tell how the prediction was made and how accurate it was.
3. Explain why the prediction was or was not accurate.
4. Consider how personal favorites compare to the others' votes.
5. Explain what was learned from this process. Did anything surprising happen?

## Activity B

Students write a paragraph describing what they learned from conducting the survey. Have them identify the things they thought would happen that did happen. Then tell about something that was surprising. When all students have completed the paragraph, in pairs have students trade log books, read their partner's paragraph, then write a short response in their partner's log book.

## Additional Resources

## Teacher Resources

- Better Than Book Reports, by Christine Boardman Moen, Scholastic, Inc., 1992

A multitude of ideas (with accompanying student blacklines) to provide authentic ways for students to share the information they have gained from reading. A four-star book!

- How to Make Pop-Ups, by Joan Irvine, Morrow Junior Books, 1987

Just what the title says: more than 25 different ideas for student-created pop-up books. Clear, well-illustrated directions guide teacher and student through the process.

- How a Book is Made, by Aliki

An explanation in child's terms of the procedure of book production. Excellent illustrations and productions.

- How to Make Books With Children, by Evan Moore Publishers, 1985

An excellent resource for a great variety of student-made books. Individual books are easy to create using readily found materials. Lots of applications.

- Multicultural Literature for Children and Young Adults, by Ginny Moore Kruse and Kathleen T. Horning, Cooperative Children's Book Center, 1991
This organization's philosophy is that one good way to learn about different groups of people is to read their original stories for background information. Materials considered offensive by the ethnic groups are not included in the resource. The book has an annotated bibliography of children's literature by and about Americans of Asian, Hispanic, and African origins, and Native Americans. An appendix lists authors and illustrators by cultural group.
- Read! Write! Publish!: Making Books in the Classroom, by Barbara Fairfax and Adela Garcia Among the many ideas for writing are step-by-step instructions for creating over 20 different books.


## To the Teacher: <br> Directions for Conducting the Book Survey and Follow-up Activities

1. Before conducting the survey or the predictions:

- Define for the class the terms on the survey: fiction, nonfiction, vote, consensus, recommend, series vs. titles, each book type, and anything else the students do not understand.
- Have the class brainstorm types of books they read and some of their favorite books and authors. (Research may be needed to discover the author and copyright date of their favorite books.) Give students time to think about and research the information.


## NOTE TO TEACHER:

PREPARE AHEAD - MAKE A TRANSPARENCY OF THE CLASS PREDICTION FORM (page 50)
2. Make predictions about the results:

- Assign the students into teams of four, different from program \#1. They should remain a team throughout this project. (If the class does not divide evenly, come as close to fours as you can.)
- Distribute the Book Survey Prediction form (page 48), one to each team. Have each team read the items and confer with each other. Students write the team's predictions on the sheet.
- After the students have had 15 minutes or so in their teams to discuss, come to a consensus on their choices and record their responses, bring the class together and compile the class totals.
- Ask one team spokesperson at a time to report the team's responses. Using the prepared transparency of the Class Prediction form (page 50) for visual reference, write the number for each team's votes for types of books, then check the preference: fiction or nonfiction and picture vs. chapter books. Discuss with the class what these results might mean. Include reference to mode, and explain that mean and median are not useful information in this type of comparison.

3. Conduct the survey:

- Hand out the Student Book Survey form (page 49) (one to each student) and read aloud each item, with students recording their choices as the teacher reads. (Please make sure the students understand the choices - this is NOT a reading test.)

4. Record the results:

- Assemble the class to discuss the results. Tally the actual votes and record the results on the Classroom Survey Response Form (page 52).
- Have the students get into the same teams of four that they were in to make their predictions, and have them confer with each other about what the results mean. Each team should use the survey graph form (page 51) to create a bar graph that shows the results. Individually have students write a short paragraph explaining how their team decided on their prediction, if their prediction was accurate compared to the actual results, and why they think the prediction was or was not accurate.
- Have each team decide what type of book to recommend to Sherlock.
- Bring the whole class together and have each team share their results.


## Directions for Conducting the Book Survey (con't)

- Decide, as a class, the one type of book you will recommend that Sherlock write, and record that information, as well as the reasoning behind the decision, on the Classroom Survey Response Form (page 52).
- Give the Sherlock Award (page 54) for the favorite book and place it in a visible spot in the classroom.

5. Share the letter from Sherlock (page 53) with the class teams. Create a checklist to help Sherlock improve his writing style.
6. Share your results with Sherlock and other schools:

- Using the information from the Classroom Survey Response Form, send the results to Sherlock electronically. Within a week of the deadline an e-mail response will come to you with the numbers of all the classes that sent in their votes. Sherlock's "Favorite Book" Award will be announced on the next S.O.S. program and in the Viewfinder.

7. Compare your class with other schools:

- After Sherlock gives your students' results from all the participating classes, compare the team's predictions to the actual results.


## Option

Duplicate this survey (or create a new one to find out other information, like whose recommendations do students listen to when choosing books, or how many students have library cards, or how often do students go to the library, etc.). Survey your whole school; compare the results by grade level. This is a perfect opportunity to generate authentic numbers for student manipulation.

## How to Guide Student Creation of a Checklist

1. In teams of four, students should brainstorm all the elements of a good book.
2. Bring all teams together and share and record all ideas, eliminating duplicates.
3. In teams again, students create a checklist for Sherlock to be the guideline for his next book. Have the teams share their checklists, then revise and improve their own from what they learn from the others.
4. Generally students should have free reign on what they include on their checklist. However, you may want to guide and suggest students add to their lists if they do not include: style, setting, character and character development, plot, climax, sequencing that makes sense, mood, imagery, point of view, attractiveness, neatness, spelling and punctuation, and any other elements that you stress in your students' writing of fiction.
5. When team lists are completed to the students' satisfaction, combine them all to make a class checklist and send the list to Sherlock by e-mail. Students poster as a reminder to themselves when they are writing.
6. You may have students write a short story and try out their new checklist to be sure it has all it needs and that it is really helpful.

# Book Survey Prediction 

(one per group)
Discuss your choices among the group members, come to a consensus, and record your group predictions below. (Remember, this is just what you think might happen, so it is okay if it does not really turn out that way!) Make a prediction about YOUR classroom. (Write on the back if you need to.)

1. Rank order the topics below (1 means the topic will get the most votes, 10 means it will get the least votes):
$\qquad$ adventure
$\qquad$ animal
$\qquad$ fairy tale
$\qquad$ humor
$\qquad$ family
$\qquad$ mystery
$\qquad$ science fiction
$\qquad$
$\qquad$ poetry
$\qquad$ travel
Reasons for the group decisions:
2. Use a $\boldsymbol{\checkmark}$ to predict which will get MORE votes:
a) fiction $\qquad$ b) nonfiction $\qquad$

Reasons for the group decision:
3. Use a $\checkmark$ to predict which will get MORE votes:
a) picture books $\qquad$ b) chapter books $\qquad$

Reasons for the group decision:

## Student Book Survey

(one per student)
Share your opinion with Sherlock. (Please be honest. Sherlock really needs YOUR help!)

1. Use a $\checkmark$ to show what kind of book is your favorite. (Vote for only one.)
$\qquad$ adventure
$\qquad$ animal
$\qquad$ fairy tale
$\qquad$ humor
$\qquad$
__ mystery
$\qquad$ science fiction
$\qquad$ biography
$\qquad$ poetry
$\qquad$ travel
2. ( $\boldsymbol{\checkmark}$ one) Would you rather read fiction $\qquad$ or nonfiction $\qquad$ ?
3. ( $\boldsymbol{\checkmark}$ one) Would you rather read picture books $\qquad$ or chapter books $\qquad$ ?
4. What is your favorite book? *

Title $\qquad$

Author $\qquad$

Copyright Date $\qquad$

* If you are not sure about this information, call your local library and ask the reference desk for help.
Class Predictions

| ভ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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|  |  | 可 |  | \|o | 느눈 |  |  |  |  |  |  |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \vdots \\ & \vdots \\ & \hline 0 \end{aligned}$ |

## Student Book Survey Graph

Use the form below to make a graph that describes how your class voted.
$\mathrm{A}=$ adventure, $\mathrm{B}=$ animal, $\mathrm{C}=$ fairy tale, $\mathrm{D}=$ humor, $\mathrm{E}=$ family, $\mathrm{G}=$ mystery, H=science fiction, I=biography, J=poetry, K=travel

Make another graph to show how your class voted on fiction and nonfiction, and another to show the vote for picture and chapter books. Share the results with another class. How do the results compare?


# Classroom Survey Response Form 

(one per class)
Use this form to record the class results.

1. Number of votes:
$\qquad$ adventure $\qquad$ mystery
$\qquad$ animal $\qquad$ science fiction
$\qquad$ fairy tale $\qquad$ biography
$\qquad$ humor
$\qquad$ family
2. Number of votes:
fiction $\qquad$ nonfiction $\qquad$
3. Number of votes:
picture books $\qquad$ chapter books $\qquad$

## 4. The class favorite is:

Title $\qquad$
Author $\qquad$
Copyright date $\qquad$
Number of votes for this book $\qquad$
5. What type of book does your class recommend Sherlock write? In one paragraph explain how you used the information you collected in the survey to decide.

Type: $\qquad$
Explanation: $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Dear Trackers,
Thanks so much for your advice about the type of book I should write. I will use your ideas to do better next time. Although the last advice I took didn't turn out so well. They told me that $I$ should write about what I know - and I do know FOOD!!! And I guess you know how that turned out!

That TV guy also said that my writing was terrible, and I think he might be right. So, I need to ask you another favor. I wonder if you could send me a list or something that might help me be sure I remembered everything in writing my new book. What are the things $I$ need to include to make a good book?

I am looking forward to your ideas so that I can start writing again. I was thinking about a story that has a brilliant beagle who has a wacky detective for a sidekick - probably has a computer or something...

I think I'll go have a chocolate fudge sundae while $I$ wait for your suggestions.

Thanks, Trackers, I couldn't do this without you!

Your friend always,


Sherlock


# Program 3: On the Right Track 



# PROGRAM 3: ON THE RIGHT TRACK 

## Content Area

- Citizenship


## Synopsis

Sherlock is visiting a local museum where the curator describes the Underground Railroad. Suddenly Sherlock finds himself transported back in time where he shares a frightening (yet enlightening) experience traveling the Underground Railroad. When he returns, Sherlock suggests that students design a gameboard that will teach kids (in a fun way) all about the Underground Railroad. Sherlock says he can't draw, but he knows where he can find someone who can.

## Tasks

Each small group will create a gameboard that will illustrate possible Underground Railroad routes from Kentucky to Canada and that will make it fun for other children to learn about the historical significance of the Underground Railroad.

## Overall Procedure

1. Whole class views the program.
2. Groups research the Underground Railroad; read related literature, identify possible routes, weather conditions, local attitudes, etc., that one would encounter between Kentucky and Canada.
3. Determine the group's roles in creating the gameboard.
4. Hold planning meetings with the small groups.
5. Each small group creates its own gameboard.
6. Do the telecommunications actitivy.

## Note:

Construction is very time consuming, so plan several class periods to complete.

## Specific Objectives

## Math

- Identify needed information to solve a problem.
- Make or use a table to record and sort information and make identifications, comparisons and predictions from tables, picture graphs, bar graphs and labeled picture maps.
- Find simple experimental probabilities and identify events that are sure to happen, events sure not to happen and those we cannot be sure about.


## Reading

- Use graphic aids or illustrations to locate or interpret information.
- Demonstrate an understanding of text by retelling the information, in writing, in their own words.


## Citizenship

- Demonstrate knowledge of and ability to think about the relationship among events by a) identifying sequence of events in history; b) grouping events by broad historical eras on a time line; c) recognizing that change occurs in history; or d) identifying cause and effect relationships.
- Identify and use sources of information about a given topic in the history of Ohio and the United States.
- Identify or describe the location of Ohio in relation to other states, to regions of the United States and to major physical features of North America.


## Telecommunications

## Discover Your State

Write a class paragraph detailing instructions for this simulation:
Imagine that your school is a "safehouse" on the Underground Railroad. Choose a school in the community next to you (but headed toward the north) and write directions that would tell people how to travel to the next safe place. Give directions to at least two locations, in case one route is blocked. On an Ohio map mark all the locations where safehouses can be found. Plot the routes that could be taken. Are there any places where travel could be dangerous? Where? Why?

On Learning Link, go to the discussion area and post your response on the bulletin board. If you want to do more, you can send e-mail directly to Sherlock from the mail area.

## Possible S.O.S. Tracker Log Book Activities

## Activity A

Use the "What I know..." form (page 5), or have students draw the lines and add the headings to a page in their S.O.S. Tracker Log Book.

## Procedure

1. Complete this activity before viewing the program.
2. Individually brainstorm what students think they know about the Underground Railroad and have them write what they know about those things on their own sheets (or in the S.O.S. Tracker Log Books).
3. The whole group then shares ideas on what they know.
4. Individually brainstorm what students want to know about the Underground Railroad and write those things on their own sheets (or in the S.O.S. Tracker Log Books).
5. The whole group then shares ideas on what they want to know.
6. At the conclusion of all activities for the show, bring out the forms.
7. Individually brainstorm what was learned about the Underground Railroad and write those things on their own sheets (or in the S.O.S. Tracker Log Books).
8. The whole group then shares ideas on what they learned.

## Activity B

Students use their imaginations to evaluate what they learned and how they felt during the process.

## Directions to students

Imagine that you are a slave who is traveling the Underground Railroad along the route that you designed for the gameboard. Imagine that you were lucky enough to be able to read and write (remember that most slaves were not allowed to learn to read or write). In your S.O.S. Tracker Log Book, describe what one day and night was like: where you went, what happened to you, who you met, and especially how you felt.

## Additional Resources

## Teacher Resources

- Poetivities, by James Wainright, 1989

A good reference for guiding poetry writing by using multi-step lessons. One lesson focuses on using games to create a poem using nouns and verbs that relate to the game. Another uses animals, personification, and point of view for the focus.

- Gonna Sing My Head Off!, Collected and Arranged by Kathleen Krull, 1992

This book is filled with American folk songs (sheet music included) complemented by incredible illustrations by Allen Garns. Arlo Guthrie, in his introduction, reminisces about the songs he used to hear and sing as a young boy. This is an excellent resource to introduce children to common tunes significant to the times of the Underground Railroad.

- Walk Together Children: Black American Spirituals, by Ashley Byran, 1974

Selection of 24 spirituals typical of the African-American tradition.

## Teacher Directions for Completing the Gameboard

1. Assign the students into new teams of four. (Create as many teams of four as you can. If your class does not evenly divide into fours, extras can form teams of five.) All students are expected to provide input and contribute to the common goal of completing a team gameboard.
2. Give every student a copy of the guidelines for making a gameboard (pages 61-62) AND the Student Checklist (page 63). As a large group, review all of the guidelines and the checklist. Be sure everyone understands the plan. Allow time for the teams to discuss their plan.
(The directions are intentionally vague. Encourage creativity in the design of the boards. A specific timeline is not given so that you can be as flexible as you need to be within the classroom.)
3. Encourage and allow time for research by all teams.
4. Have the students themselves determine who will do what to accomplish the task within their teams. Teams then complete the gameboard, and as a team fill out the checklist to be handed in with the board.
5. Each team should then write a paragraph to send to Sherlock describing the gameboard, how it works, and an anecdotal story about how the team worked together to make the board. Send one file with all team reports included by e-mail or snail mail to Sherlock. Sherlock will share these paragraphs with the other classes.

## Note:

Local pizza restaurants may donate some clean pizza boxes to be used as gameboards.

## Student Guidelines for Creating a Gameboard

(one set per group)

1. Decide the objectives of your game (what do you want your game to teach?). Write them down.
2. Research the Underground Railroad. Divide the areas of research among the team members, and find out as much as you can about:
a) why the Underground Railroad existed
b) some of the areas people passed through on the Underground Railroad
c) some of the problems people had on their trip
d) the states mostly involved
e) some names of people who were involved
f) how people in your local area were involved in the Underground Railroad
g) signs and signals used by the Underground Railroad
h) how music was a part of the Underground Railroad
3. As a team, plan your gameboard. Think about how you want the board to look:
a) what locations and landmarks will you use?
b) how will you represent people and places on your board?
c) how will you make the trail?
d) what materials will you use?
e) what design or shape will you use?
f) what size will it be? (consider storage problems)
g) what will you use for game pieces?

Plan what type of game it will be:
a) will you use cards to answer questions? how will you use them?
b) if you use cards, what type of questions will be on the cards?
c) how will your players move along the trail?
d) how will obstacles fit into the game?
e) how will you store the games pieces and board?

Decide team jobs:
a) who will compile the research done by all members?
b) who will draw the board?
c) who will add the print to the game?
d) who will write the cards? (ifyou use cards)
e) how will the team decide if everyone is doing enough to get it done?
4. Draw a rough draft of the board before you actually start the finished product.

Directions:
a) explain the steps to play your game one at a time, in order.
b) number the steps.
c) have someone NOT in your group read the directions to see if they make sense.

Cards: (if you choose to do cards)
a) write your list of questions and answers on one page.
b) check to make sure words are spelled right and answers are correct.
c) check to make sure you don't have two identical questions.
d) make sure you have enough questions to last the whole game.

Board:
a) practice first on scratch paper. Lightly sketch the outline.
b) make corrections, additions, and replacements as you need to.
c) try out the cards, dice or spinner to be sure they work as planned.
5. Final Revision:
a) have all group members check all the planned parts.
b) change the parts that need it.
c) proofread all words and sentences for accuracy and spelling.
d) use editing marks to make your revisions.
e) compare the game to your objectives.
6. Publishing:
a) copy the questions onto cards (if you use them).
b) draw the board on your chosen surface.
c) add illustrations and color to the board.
d) copy words onto the board.
e) provide storage for the board and pieces.

## Student Checklist for Gameboard Construction

To be completed by the group before the gameboard is turned in.

1. What do you want your game to teach? $\qquad$
$\qquad$
$\qquad$
2. We have (check each one you have completed):
$\qquad$ a) used some actual geographic and physical landmarks.
$\qquad$ b) indicated some realistic weather obstacles.
c) indicated some realistic human obstacles.
$\qquad$ d) used/created signals and symbols that were followed.
e) included possible hiding places.
$\qquad$ f) provided adequate storage of pieces and board.
g) included appropriate symbols, a key, and the compass rose.
$\qquad$ h) written directions.
3. Our directions are:
$\qquad$ clear.
$\qquad$ understandable.
4. The appearance of our gameboard is:
$\qquad$ neat.
$\qquad$ colorful.
$\qquad$ creative (different from everybody else's).
___ attractive; appealing.
5. What did players learn from playing your game? $\qquad$
$\qquad$
$\qquad$
6. Did everyone on our team contribute ideas and work?

Check yes, if true, and sign your name on the line. Describe your job.
Yes Name Job
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Team Research Organizer


> Use this sheet to keep track of the
> information your team collects.
> 1. Why did the Underground Railroad exist?
2. What were some of the geographical
areas people passed through on the
Underground Railroad? Were they near
where you live?
3. What were some of the problems people had on their trips?

Underground Railroad.
5. Who were some of the people involved?
6. How were people in your local area
involved in the Underground Railroad?
Who were they?
7. What were some signs and signals
people used on the Underground Railroad?
8. How was music a part of the
9. What other interesting facts did
you find?

Program 3: On The Right Track

# Program 4: Grinny's Danger 



# PROGRAM 4: GRINNY'S DANGER 

## Content Area

- Science


## Synopsis

Through his friendship with a peregrine falcon, Sherlock discovers the plight of endangered species. Local attempts to solve the problems of the falcon are shown, and Sherlock asks the audience for help in establishing a safe place for his friend's friends.

## Tasks

The whole class will design and build a refuge (model or map) in which five endangered animals and/or plants can live together and be safe. Collaborate with others electronically to contribute to and use a group database to help decision-making. Add as many of the animals on the electronic database as possible. Write a description of reasoning behind choices and placement of animals to share with Sherlock and other classes.

## Overall Procedure

1. Whole class views program live or on tape.
2. Whole class will design and build a model refuge for five animals and/or plants the group would like to protect.
3. Small groups research one of the five choices. The class will develop a database to help organize arrangement of animals. (See sample database format on page 76.)
4. Groups share within the classroom and electronically the researched information about the animals and/or plants. (A combined database will be created.)
5. Groups plan the appropriate habitats for their choices and confer with other groups to make sure the information proves the animals can live harmoniously together.
6. The groups collaborate to build a model of the refuge.
7. Do the telecommunications activity.

## Specific Objectivies

## Math

- Sort or identify objects on multiple attributes (e.g. size, shape and shading)
- Identify needed information to solve a problem.
- Use graphic aids or illustrations to locate or interpret information.
- Demonstrate an understanding of text by retelling the story or poem, in writing, in their own words.
- Infer from text.
- Demonstrate an understanding of text by retelling the information, in writing, in their own words.
- Discern major ideas and supporting ideas.


## Science

- The learner will discuss the impact of human activity in selected natural environments.
- The learner will identify an example of an improbable, illogical event in a selected story and point out contradictions.
- Given a series of related events , the learner will analyze the series and predict the next likely event.
- Given a set of counts of objects or observations, the learner will construct a graphic representation and use it to make simple comparisons.
- The learner will create and follow a simple procedure to carry out an investigation.
- The learner will propose reasons why observations made by another learner may be different than hers/his.


## Telecommunications

## Refuge Advertising

Create a class brochure for your refuge telling why visitors would want to come and visit. The text should include a short summary of the features of the refuge, the animals that are being preserved there, plans for future animals, and any special or unusual features. Most important to include is the reason these animals are to be preserved - aside from the fact that they are endangered. How will the world be a better place because these animals are still here?

On Learning Link, go to the discussion area and post your response on the bulletin board. If you want to do more, you can send e-mail directly to Sherlock from the mail area.

## Extensions

To find out where an adopt-an-animal program is available near you, write:
The American Association of Zoological Parks and Aquariums
4550 Montgomery Avenue, Suite 940N
Bethesda, Maryland 20814

## Possible S.O.S. Tracker Log Book Activities

## Activity A

Before the program, use the procedure followed in program \#3 to have students address what they know and what they want to know about endangered species.

## Activity B

At the conclusion of this program, the students have researched a great deal of information about five different animals that are endangered. In their S.O.S. Tracker Log Book students write a short list of what they learned about the animals. Then write a sentence or two about how their team determined that the animals would be able to live with each other. And finally write a paragraph on how they would test their plan to be sure it would work if they were really going to build the refuge.

## Additional Resources

- Project Wild, Western Regional Environmental Education Council, 1986, Project Wild, P.O. Box 18060, Boulder, CO 80308-8060
Over 250 pages of student activities related to the environment. Many activities related to specific endangered species are provided. A very complete resource.
- Nature Scope, Endangered Species: Wild and Rare, Ranger Rick; National Wildlife Federation, 1989

Excellent resource of background information and student activities. Numerous motivating and meaningful extension activities are described.

## Agree/Disagree Chart

## Directions:

As the teacher reads each statement, talk it over with your group. Put a $\boldsymbol{\checkmark}$ in the "agree" or "disagree" box. Share with your group why you made your choice. Number from 1 to 6 and write your reasons on the back.

|  | Before |  | After |  |
| :--- | :--- | :--- | :--- | :--- |
| Statement | Agree | Disagree | Agree | Disagree |
| 1. Mammals are the most <br> important animals to save <br> (rather than reptiles, birds, <br> insects, or fish). |  |  |  |  |
| 2. It is more important to <br> save animals than plants. |  |  |  |  |
| 3. The best reason to save <br> an endangered species is <br> because they provide food <br> and clothes for people. |  |  |  |  |
| 4. There are only a few <br> endangered species, so <br> there's no need to be too <br> concerned now. |  |  |  |  |
| 5. Once the species is in <br> trouble, there are still things <br> that can be done to save it. |  |  |  |  |
| 6. People's needs are more <br> important than the needs of <br> wild animals. |  |  |  |  |

Save this sheet and repeat this process when you have completed your refuge.

Name: $\qquad$


## Data Sheet



Name of ENDANGERED: $\qquad$
species:(plant or animal?) $\qquad$
habitat: $\qquad$
world region: $\qquad$
mating/nesting habits: $\qquad$
range: $\qquad$
community needs: $\qquad$
natural enemies: $\qquad$
shelter requirements: $\qquad$
migration patterns: $\qquad$
food: $\qquad$
size: $\qquad$
reason for endangerment: $\qquad$
$\qquad$

Other information: $\qquad$
$\qquad$
$\qquad$

# To the Teacher: <br> Guidelines for Building a Model Refuge 

The whole class will be working together in teams to create one refuge for the class. The following is a suggested sequence of activities to accomplish this task.

## Before viewing the program

To help students decide which animals to save from the many options and determine which endangered plants are a problem, the students need to clarify their reasoning and decision-making skills. Have the students complete the Agree/Disagree Form (page 69), one item at a time.
a) Form teams of four to five students.
b) Teacher reads each statement.
c) For each statement allow two to three minutes for the team discussion.
d) Each student responds individually on paper.

Be sure students explain how they came to their answers - that is more important than the decision itself.

## After viewing the program

1. Create teams to perform initial research.

- Divide class into five teams. Teams brainstorm to generate a list of endangered animals. (You may want to have resources available for inspiration.)
- Each team chooses two or three animals to start researching. Research basic information about those animals. (Not in depth, as this information is needed to decide which animal will be researched.)
- Each team researches the endangered species it has chosen. Divide the items up among the team members, but allow all students to research all areas, then share what they find. Each student uses the data sheet to record information about its:
a) habitat requirements
b) nesting and mating habits
c) range - how much space does it need?
d) community needs - does it need others of its kind around or does it like to be alone?
e) natural enemies - where in the food web is this animal?
f) migration - where and why does it migrate?
g) food - what does it need to eat?
h) size - how tall, heavy, etc. is it?
i) reason this animal is endangered - what is the major threat to the animal?
j) other - anything else interesting you can find out
- Each team comes to consensus on their first choice. The team report will be on just that one species.

2. Begin the planning process. Conduct a whole class discussion to choose the five species.

- Each team gives a brief description of the researched animal.
- Whole class compares the initial research from all teams.
a) Decide if these species can all live together in one area.
(The whole group determines the compatibility of the species presented. If these species cannot be accommodated, the teams can choose another species, but when finished, each team should be accountable for one species.)
b) Decide what species each team will research.

Now is the time to change choices of species if there are problems with the compatibility of the ones students have already selected.
c) Decide what each team will provide for the building of the model.
A) who will draw the plans?
B) who will compile the research done by all members?
C) who will add print to the model?
D) who will build the parts and put them together?
E) how will the team decide if everyone is doing enough to get it done?
F) who will write, proofread, and revise the report for Sherlock?
3. As a whole class, plan the model
a) Review what teams will research which animals.
b) Conduct the research.
c) Begin compiling the class database.

The teacher should enlarge the Sample Database (page 76) on mural paper or large tag board so that the students can write in the information as they acquire it.

As teams: (See page 74)
Think about what needs your team choice species will have:
a) how will its food needs be met?
b) what type of climate is needed?
c) how will shelter and water be provided?
d) how large an area do you need to provide?
e) does your species have any special needs?
f) how will you handle visitors to your refuge?

## As a whole class:

Think about how your refuge will meet the needs of all your refugees:
a) how will all teams' animals/plants get along with each other?
b) will their food needs conflict with one other?
c) are there climate conflicts?
d) can these needs be realistically met?

Think about how you want the model to look:
a) what locations and landmarks will you use?
b) how will you represent people and places on your model?
c) what information do you need?
d) what materials will you use?
e) what design or shape will you use?
f) what size will it be? (consider storage problems)

Plan what type of model it will be:
a) what materials can you use to create the desired look?
b) how will you show the habitat necessary for your refugees?
c) what will you use to indicate distances?
d) will you have a key? compass rose? scale indicator?
e) how will you store the model?
4. Assign teams roles to complete the model:

Tasks that teams need to accomplish:

## Preliminary activities:

a) Draw a rough draft of the plan before actually starting the final project.
b) Lightly sketch the design on paper to plan the dimensions.
c) Check the placement of the planned elements.
d) Check each animal's needs to see if the plan will work.
e) Have someone NOT on your team check your details.
f) Make corrections, additions, and replacements as needed.
e) Compare the refuge to your objectives.

## Publishing:

a) Draw/build/create the parts of the refuge.
b) Put together all the parts.
c) Provide storage for the model.
d) Complete the Refuge Checklist (page 75) and turn in the project.

## After the refuge is complete:

Download the electronic database. Your next class challenge is to expand your refuge. Can your class save more of the animals on that list? Check out the database information given on each of the animals that were not saved by your class refuge. Determine which of the animals could be safe in your refuge and prove it. Write a short report on the class findings. E-mail your results Sherlock.

Use this sheet to help you organize your research.

Your Chosen Animal or Plant $\qquad$

1. How will its food needs be met?
2. What type of climate is needed? (What world region is your plant or animal from?)
3. How will shelter and water be provided for?
4. How large an area do you need to provide?
5. Does your species have any special needs?
6. Are there animals or plants that MUST be avoided?
7. How will you handle visitors to your refuge?
8. What else have you considered?

## Refuge Model Checklist

To be completed by the whole class when the model is complete.

1. What plants and animals will be safe in your refuge? $\qquad$
$\qquad$
2. (Check each one you have completed.) We have:
$\qquad$ a) met the food requirements for all species.
$\qquad$ b) provided adequate shelter.
c) accommodated specific world region requirements for all species.
d) provided adequate space for the species' comfort.
e) provided for special needs.
f) provided for visitors to the refuge.
g) included appropriate landmarks, symbols, and other representations.
h) provided protection from natural enemies.
i) avoided the reason for the species originally becoming endangered.
3. Our model/map representations are:
$\qquad$ clear.
$\qquad$ understandable.
4. The appearance of our model/map is:
$\qquad$ neat.
$\qquad$ colorful. creative (uses ideas that are unusual).
$\qquad$ attractive; appealing.

5. What do visitors to your refuge see and feel? $\qquad$
$\qquad$
$\qquad$
6. Did every team contribute ideas and work?

Check yes, if true, and sign your team's name on the line. Describe the team's job.
Yes Team Name Job
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$


> Program 5: Mighty Bites


# PROGRAM 5: MIGHTY BITES 

## Content Area

- Reading
- Writing


## Synopsis

After Sherlock watches a TV commercial for great dog bones, he tries one and hates it so much that he spits it across the room and out the door. Several encounters with commercials and disappointments lead Sherlock to request the S.O.S. Trackers to look at ads and then create one, so that they won't be taken in as he was.

## Tasks

Analyze existing commercials, then each small group will create one of the following:
a) video commercial
b) photo storyboard
c) storyboard
d) print ad (e.g., a magazine page)

The teams will try to sell a used toy that someone in the class no longer wants. Direct the commercial to first graders; be persuasive, but do not lie in the commercial.

## Overall Procedure

1. Whole class views program live or on videotape.
2. Whole class views commercials. Small groups record and analyze information on several commercials.
3. Summarize results.
4. Groups decide media to be produced.
5. Create media.
6. Show the media to first graders.
7. Do the telecommunications ativity.

## Specific Objectives

## Math

- Make or use a table to record and sort information and make identifications, comparisons and predictions from tables, picture graphs, bar graphs and labeled picture maps.


## Reading

- Respond to the text.
- Choose materials related to purposes, as evidenced in part by the capacity to a) choose or identify library resources $\mathbf{b}$ ) select fiction or nonfiction materials in response to a topic or theme and $\mathbf{c}$ ) choose appropriate resources and materials to solve problems and make decisions.
- Demonstrate an understanding of text by predicting outcomes and actions.


## Writing

The student's writing will evidence:

- A response that stays on the topic.
- The use of detail to support the topic.
- An organized and logical response that flows naturally and has a beginning, middle and end.


## Telecommunications

## Consumer Report

Members of the class will share their consumer experiences. Name a product that was purchased, as well as seen in a commercial. Was it as good as it looked? How did the commercial make you want the product? Was the product a good one? What was wrong with it? Also, have the class test a product against commercial promises (for example, are the cookies in the bag as big or have as many chocolate chips as the picture?)

On Learning Link, go to the discussion area and post your response on the bulletin board. If you want to do more, you can send e-mail directly to Sherlock from the mail area

## Possible S.O.S. Tracker Log Book Activities

## Activity A

After viewing the program and before showing the commercials, students draw a line vertically splitting the page in half. On the left side of the page the students write a short paragraph explaining how they think a first grader will respond to their commercial and why they think that. After the first graders view the commercial, use the right side of the page to record what the first graders thought, and why the prediction was or was not accurate.

## Activity B

In a private diary $\mathbf{O R}$ in a piece of writing to be shared with the teacher, students respond to one of these sets of questions:

1. What guidelines should the makers of commercials have to follow? Who should decide those guidelines?
2. What qualities of fairness should be in a commercial? Why?
3. If you were going to write a new commercial, what would it be about? Why?
4. Tell about a commercial you watched that you thought was not fair. What about it was not fair? How would you change it to make it fair?
5. "It is a good idea to use testimonials in a commercial." Do you agree or disagree with that statement? Why or why not?

## Additional Resources

- Zillions: Consumer Reports for Kids, Individuals, six issues/\$16. Subscriptions, Box 51777, Boulder, CO 80321. Subscriptions, Zillions Classroom Program, Box 3760 Jefferson City, MO 65102.
- Kid Vid by Kaye Black, Zephyr Press, 1989

Basics of video production in the classroom with minimum equipment, clearly written, easy-to-read instructions. Possible video projects are also described.

- Children and Media, by Don Kaplan, Instructor Books, 1986

Oodles of ready-to-use activities for the classroom teacher in the areas of mass media, visual thinking, photography, videotape, TV, and more.

- Media Cookbook for Kids, by Mary Ellen Cravottaa and Savan Wilson, Libraries Unlimited, 1989. Directions for teachers, but easy enough for kids, blackline directions on how to create a photo storyboard, audio project, books, sound slide shows, sound filmstrips, videotape show, and much more.
- Write, Camera, Action, ed. by Sherri M. Butterfield, The Learning Works, 1986

Creative writing activities based on screenplay techniques.

- Beyond TV: Activities for Using Video with Children, by Martha Dewing, 1992

Good background information, as well as developmental aspects for young viewers.

- Let's Play TV, by TV Ontario

Excellent step-by-step, hands-on activities for students in analyzing video and then simple video production. Call 1-800-331-9566 for information and current price.

# To the Teacher: <br> Directions for Creating a Commercial 

Before starting to plan the creation of an advertising piece, a "video" background needs to be established. Students need a frame of reference to understand media. The most important concept of media literacy is that all media are constructions - which means that everything on TV, in magazines, newspapers, etc. are constructed for some purpose. In order to alert students to this concept, students need to begin by looking at the parts of a commercial to see how they are constructed.

## Pre-Planning

1. Introduce students to the "camera shot" and "camera movement" (pages 91-92) to instruct students in the terminology. Have students practice recognizing the types of shots. Practice by viewing a drama type program (like "From the Brothers Grimm"). Use the Video Analysis form (page 86) to tally the different aspects of video. Have small groups discuss why they thought the director used different shots in the scene.

## Procedure for practice

- As the students watch, they should put a tally mark in the appropriate box. Students tally their own Video Analysis forms as they view the video clip.
- Show about three minutes of video and have students look for each type of shot. For example: Show the video. All students tally the number of close-ups, medium shots, and long shots they see. (Warn them that they won't see every shot; the scenes change VERY quickly - that's OK, just try for the next one.)
- As a class, share the general numbers found for each type of shot.
- Small groups discuss their observations: first, pairs share their results, then the group of four compares what they found. Have pairs discuss why they think the particular shots were used in the video.
- Repeat the activity and this time look for the camera angle in various videos.

NOTE 1: Use a video that students are familiar with OR show the entire program before the tally activity otherwise students have a difficult time trying not to follow the storyline.

NOTE 2: This activity is very difficult to do with commercials because they are so quick-moving and short.
NOTE 3: You may want to repeat this activity with different types of video for the opportunity to compare effects.

## (NEEDS TO BE PREPARED AHEAD!)

2. The teacher should record from TV at least one commercial designed for children. Most of Saturday mornings are devoted to children, so this would be a good time to record the commercials. If taping is difficult for you, perhaps a parent could do it for you. Viewing more than one commercial gives a better basis of comparison. Three commercials would be a good start.

- Use the Techniques of Persuasion list (page 90) to instruct students about persuasion. As homework Have students view commercials and identify the types of persuasion being used.
- Have the class view the taped commercial(s).
- Assign small groups to view the commercial together. (Show the whole group, but have students who are seated near each other work together for easy collaboration.)
- Each student should fill out the Commercial Reaction Form (page 93).
- Form small groups to discuss the results, then have groups share with the whole class.


## Planning

## Storyboarding Practice

1. To begin writing a script, students need to "storyboard." (Storyboard means writing a script to be translated into a video format.)
2. Before the activity: Cut apart the character and product cards (pages 87-89). Put three characters and one product in an envelope. Give each group of four students an envelope.
3. Introduce the storyboard form (page 85). Students in small groups brainstorm ideas on how the three characters can be portrayed to sell the product. Draw stick figures in the TV to indicate what will be seen in the commercial, and write what will be said in the commercial on the lines below the box. Encourage the use of different types of shots.
4. Remind the students to use persuasion techniques from the list.
5. Have each group share their commercial with the group.

## Creating the visual product

1. Assign groups of four to collaborate on the final production. The whole group will decide on the item to be sold, then each group will determine the media they will use: video, photo storyboard, storyboard, or print ad (magazine). The item they choose to sell should be an actual item owned by someone in the class. The commercial should be aimed at first graders, and it should be persuasive but NOT tell lies. Each group can choose a different media, but all groups will sell the same item.
2. Each team should decide on a format:

- video - a one-minute videotape commercial
- photo storyboard - a series of pictures attached to a board with captions
- storyboard - a series of drawn pictures attached to a board with captions
- print ad (magazine) - a one-page poster suitable for a magazine ad

3. Small groups use the storyboard form to sketch out their plan for how their advertisement will look. The group will decide who will do what to complete the project.
(The following are just suggestions of possible jobs, depending on the size of your groups and the needs of the group):

Video:

- producer - oversees all steps in the process, keeps group on task
- script writer - prepares and revises the script
- director - guides crew through the taping
- camera person - operates the camera
- talent - actors and actresses


## Photo Storyboard:

- producer - oversees all steps in the process, keeps group on task
- script writer - prepares and revises the script
- director - guides crew through the photo shoot
- camera person - operates the camera
- talent - actors and actresses


## Storyboard

- producer - oversees all steps in the process, keeps group on task
- script writer - prepares script
- graphic artist - draws the graphics (pictures)
- editor - checks for accuracy, helps with revisions
- printer - writes the captions


## Magazine ad

- producer - oversees all steps in the process, keeps group on task
- designer - plans the layout of pictures and text
- graphic artist - draws the graphics (pictures)
- editor - checks for accuracy, helps with revisions
- printer - writes the ad copy

4. The group works to construct an advertisement. Use the evaluation forms (pages 94-97) to rate their own projects and to guide revision and reconstruction.
5. Determine a date for each group to share their commercial/ad. Arrange to show the commercials to a first grade class. Have the first graders rate the commercial.
6. Each group writes a summary of their project to send to Sherlock.


## Video Analysis \#1

Directions: As you watch the commercial or video, put a tally mark each time you see one of the shots below. (You won't get them all, but that's OK. You may get a different count from other people, and that's OK, too.)


## Video Analysis \#2

Directions: As you watch the commercial or video, put a tally mark each time you see one of the angles below. (You won't get them all, but that's OK. You may get a different count from other people, and that's OK, too.)

astronaut
lion tamer
wizard
teacher
pioneer
magician
snoopy neighbor

| newborn baby | unicorn | magical elf |
| :---: | :---: | :---: |
| knight | cowboy | bullfighter |
| chef | newspaper <br> reporter | birdwatcher |
| ballet dancer | bandit <br> gisherman | mom |
| butler |  |  |

pencil
pencil
marbles
jeans

## sneakers

T.V.
camera
video game
watch
toy car
book
hamburger

## Techniques of Persuasion

## 1. Testimonial

An important person may testify that he/she has used a product. The buyer thinks "If that person uses it, it must be good." The person in the ad may actually know nothing about the product's quality.

## 2. Sense Appeal

Pictures or sounds are used to appeal to the senses. The buyer begins to "taste" and is motivated to buy.

## 3. Transfer

A good-looking, sociable, sexy or well-dressed man or woman sells the product. The buyer associates the product with someone good-looking or admirable and imagines that, by using the product, he/she will become like that person.

## 4. Bandwagon

Language may be used that suggests that "everyone" or "all the people" are doing it or using it. The buyer doesn't want to be left out or appear "out of it" and so buys the product.

## 5. Plainfolks

An ad may show an average person recommending the product, so the average buyer identifies with that person, takes the advice, and buys the product.

## 6. Generality

An ad uses words with subjective general meanings with no substantiation in fact. Some examples of these generalities are "the best," "great," and "the only." Buyers are bombarded with positive words that aren't really true indicators of quality.

## 7. Romance Fantasy

(similar to Transfer) Dancing Raisins, Green Giants, or skilled super athletes are often featured in a commercial. Unreal powers or features are attributed to the character or person, but the buyer associates these attributes with the product anyway (on a subconscious level).

## 8. Humor

People tend to associate positive feelings with the product if the commercial for the product makes them laugh.

## 9. Statistics

Buyers are impressed with statistics even if variables such as who conducted the survey, or what kind people were polled are not mentioned.
10. Fact vs. Opinion

Statements that are opinions that haven't been proven still carry weight and are accepted as fact because the buyer is convinced the speakers know what they are talking about.
11. Public Good

Ads claim to be concerned about social or ecological problems.

## 12 Cardstacking

Ads give one-sided portrayal of their product - the good side!

## CAMERA MOVES



Zoom
Changing the focal length of the lens
Zoom in - makes the object appear closer
Zoom out - makes the object appear farther away


PAN LEFT


## Pan

To move the camera from side to side
Pan left - Move the lens to the left
Pan right - Move the lens to the right

## CAMERA ANGLE

The angle is determined from the lens of the camera.


High Angle


Eye Level


Low Angle

## CAMERA SHOTS

Shot: L.S.


Long Shot (L.S.) used to:
Show where you are (Also called an establishing shot.)
On top of a mountian
In a living room
Show a large group of people
Everyone who will appear in the program
A group demonstrating
Show all of something
A house
A statue

Shot: M.S.


Medium Shot (M.S.) used to:
Move in closer on what's important in the picture
Cuts out unwanted people or background
Focuses the audience's attention
Lets people get a better look at what's important
Person talking
What the person is talking about

Shot: C.U.


Close Up (C.U.) used to:
Isolate what's important in the picture
People's faces
What something is demonstrating
Enlarge something to give the audience a better view
A cutting board during a cooking show
A person's hand during a manicure demonstration

Shot: E.C.U.


Extreme Close Up (E.C.U.) used to:
Show details or small objects
Inside a watch
A single person in a group photo
Add unusual effects to the program
Someone's mouth
(Comic effect or to show a person's anger)
Enlarge a bug to the size of the TV screen

## Commercial Reaction Form

After you watch the commercial, write your reactions below:

1. What was the name of the product?
2. Was there music in the commercial? How did it make you feel?
3. What was the commercial about? Were there elements of fantasy?
4. How did you feel about the product before you watched the commercial?
5. How did you feel about the product after you watched the commercial?
6. Was there any mention of how much the item cost? Why do you think that was?
7. What type of persuasion was used?
8. At the end did you want to buy it? What in the commercial made you feel that way?

## Storyboard Evaluation

Rate your own storyboard. ( $1=$ pretty bad, $5=$ so-so, $10=$ the best it could be $)$

## Technique:

1. The pictures are clear and centered.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2. The pictures are drawn well.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
3. Color and contrast are well used.

$$
\begin{array}{llllllllll}
1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10
\end{array}
$$

4. We use different angles and/or points of view for interest.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Content:

1. The order of scenes and story in the commercial makes sense.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
2. We use persuasion techniques, but still tell the truth.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
3. Overall the commercial is interesting and appealing.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4. We were creative. We used ideas no one else had.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$

If you have more than three statements that scored below 6 , the group will want to revise and redo the commercial. Have another group view your commercial and score it. Did they score it like you did?

## Video Evaluation

Rate your own video. ( $1=$ pretty bad, $5=$ so-so, $10=$ the best it could be $)$
Video technique:

1. The picture is steady.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2. The picture is in focus.
123
5
$6 \quad 7$
89
10
3. The lighting is not too dark or harsh.

$$
\begin{array}{llllllllll}
1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10
\end{array}
$$

4. We can hear the speaker clearly, and there are no extra sounds.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
5. We use different angles and camera movements for interest.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$

## Content:

1. The order of scenes and story in the commercial makes sense.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2. We use persuasion techniques, but still tell the truth.

$$
\begin{array}{llllllllll}
1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10
\end{array}
$$

3. The talent is on cue and interesting.

$$
\begin{array}{llllllllll}
1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10
\end{array}
$$

4. Overall the commercial is interesting and appealing.

$$
\begin{array}{llllllllll}
1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10
\end{array}
$$

5. We were creative. We used ideas that no one else had.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$

If you have more than three statements that scored below 6, the group will want to revise and redo the commercial. Have another group view your commercial and score it. Did they score it like you did?

## Photo Storyboard Evaluation

Rate your own storyboard. ( $1=$ pretty bad, $5=$ so-so, $10=$ the best it could be)

## Technique:

1. The pictures are clear and centered.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
2. The pictures are in focus.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
3. The lighting is not too dark or harsh.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
4. We used different angles and/or points of view for interest.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$

## Content:

1. The order of scenes and story in the commercial makes sense.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
2. We use persuasion techniques, but still tell the truth.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
3. Overall the commercial is interesting and appealing.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
4. We were creative. We used ideas no one else had.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$

If you have more than three statements that scored below 6, the group will want to revise and redo the commercial. Have another group view your commercial and score it. Did they score it like you did?

## Magazine Ad Evaluation

Rate your own advertisement. ( $1=$ pretty bad, $5=$ so-so, $10=$ the best it could be $)$

## Technique:

1. The picture is clear and centered.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2. The picture uses color and contrast to make the point.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
3. The design emphasizes the product.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
4. We use different angles and/or points of view for interest.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$

## Content:

1. The picture makes sense.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
2. We use persuasion techniques, but still tell the truth.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
3. Overall the ad is interesting and appealing.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$
4. We were creative. We used ideas no one else had.
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10\end{array}$

If you have more than three statements that scored below 6, the group will want to revise and redo the commercial. Have another group view your advertisement and score it. Did they score it like you did?

# Ohio Fourth-Grade Proficiency Test Learning Objectives 



## OHIO FOURTH-GRADE PROFICIENCY TEST LEARNING OBJECTIVES

## LEARNING OBJECTIVES FOR MATHEMATICS

1. Sort or identify objects on multiple attributes (e.g. size, shape and shading)
-2. Use patterns to make generalizations and predictions by a) determining a rule and identifying missing numbers in a sequence; b) determining a rule and identifying missing numbers in a table of number pairs; c) identifying missing elements in a pattern and justifying their inclusion; and d) determining a rule and identifying missing numbers in a sequence of numbers or a table of number pairs related by a combination of addition, subtraction, multiplication or division.

- 3. Select appropriate notation and methods for symbolizing a problem situation, translate real-life situations involving addition and/or subtraction into conventional symbols and words.

4. Identify needed information to solve a problem.
5. Explain or illustrate why a solution is correct.
6. Decompose, combine, order and compare numbers.

- 7. Illustrate or identify fractional parts of whole objects or sets of objects and like fractions greater than one, and add and subtract like fractions with illustrations and symbols.
- 8. Add, subtract, multiply and divide whole numbers and explain, illustrate or select thinking strategies for making computations.
- 9. Order fractions using symbols as well as the terms "at least" and "at most."
-10. Represent whole number value by a) applying place value ideas and b) translating between words and symbols in naming whole numbers.

11. Add and subtract decimals.
-18. Apply the counting of collections of coins and bills in a buying situation.
12. Determine perimeters and areas of simple straight line figures and regions without using formulas.

- 21. Use mental, paper-and-pencil and physical strategies to determine time elapsed.

22. Apply concept of place value in making estimates in addition and subtraction using front-end digits.
-23. Round numbers and use multiples of ten to estimate sums, differences and products and discuss whether estimates are greater than or less than an exact sum or difference.

- 24. Make or use a table to record and sort information and make identifications, comparisons and predictions from tables, picture graphs, bar graphs and labeled picture maps.

25. Find simple experimental probabilities and identify events that are sure to happen, events sure not to happen and those we cannot be sure about.

## - Denotes critical objective

## LEARNING OBJECTIVES FOR CITIZENSHIP

- 1. Demonstrate knowledge of and ability to think about the relationship among events by a) identifying sequence of events in history; b) grouping events by broad historical eras on a time line; c) recognizing that change occurs in history; or d) identifying cause and effect relationships.

2. Identify and use sources of information about a given topic in the history of Ohio and the United States.
-3. Relate major events in state history to time periods in the history of the nation and the world.
3. Demonstrate map skills by a) identifying selected major references on the earth; b) locating major land forms and bodies of water; and c) using a number/letter grid system to locate places on a map, a map key to understand map symbols, a linear scale to measure distances or a map and a direction indicator.
4. Use maps and diagrams as a source of information to a) recognize continents by their outlines and major physical features; b) recognize characteristics of major land forms and bodies of water; c) describe the physical differences between places; or d) explain the influence of the natural environment on the settlement of Ohio and on changes in population patterns, transportation and land use.
-9. Identify or describe the location of Ohio in relation to other states, to regions of the United States and to major physical features of North America.
5. Identify the factors of production (land, labor, capital and entrepreneurship) needed to produce various goods and services.
-11. Name the resources needed to produce various goods and services, classify each resource by the factors of production, or suggest alternative uses for those factors.
6. Classify various economic activities as example of production or consumption.
-13. Identify the function of each branch of state government.
7. Identify the purposes of state government.
-15. Identify or explain the purposes of local government.

- 16. Differentiate between statements of fact and opinion found in information about public issues and policies.
-17. Identify and assess the possibilities of group decision-making, cooperative activity and personal involvement in the community.

18. Identify the elements of rules relating to fair play.

- Denotes critical objective


## LEARNING OBJECTIVES FOR READING

Learners will demonstrate an understanding of language and elements of fiction/poetry by responding to items in which they:

1. Summarize the text.
-2. Use graphic aids or illustrations to locate or interpret information.
-3. Demonstrate an understanding of text by retelling the story or poem, in writing, in their own words.
2. Identify and interpret vocabulary (words, phrases, or expressions) critical to the meaning of the text.

## Learners will demonstrate an understanding of language and elements of fictional narrative by

 responding to items in which they:- 5. Analyze the text, examining, for example, actions of characters problem/solution, plot, or point of view.

6. Infer from text.

- 7. Compare and contrast elements such as characters, settings, or events.
-8. Respond to the text.

9. Choose materials related to purposes, as evidenced by the capacity to a) choose or identify library resources to locate specific information; b) select fiction and nonfiction materials in response to a topic or theme; c) choose appropriate resources and materials to solve problems and make decisions.
10. Demonstrate an understanding of text by predicting outcomes and actions.
11. Summarize the text.
-12. Use graphic aids or illustrations to locate or interpret information.
12. Demonstrate an understanding of text by retelling the information, in writing, in their own words.
13. Identify and interpret vocabulary (words, phrases, or expressions), critical to understanding of the text.

## Learners will demonstrate an understanding of language and elements of nonfiction by responding to items in which they:

-15. Discern major ideas and supporting ideas.
-16. Analyze the text, examining, for example, comparison and contrast, cause and effect or fact and opinion.
17. Infer from the text.

## READING (con't)

-18. Respond to the text.
19. Choose materials related to purposes, as evidenced in part by the capacity to a) choose or identify library resources b) select fiction or nonfiction materials in response to a topic or theme and c) choose appropriate resources and materials to solve problems and make decisions.
20. Demonstrate an understanding of text by predicting outcomes and actions.

- Denotes critical objective


## LEARNING OBJECTIVES FOR WRITING

The learner will use the writing process to make the intended message clear, as evidenced by:
A. A response that stays on the topic.
B. The use of detail to support the topic.
C. An organized and logical response that flows naturally and has a beginning, middle and end.
D. The use of a variety of words.
E. The use of a variety of sentence patterns.
F. A response that shows an awareness of word usage (vocabulary, homonyms and words in context).
G. A response that shows an awareness of spelling patterns for commonly used words.
H. Legible writing in print or cursive.
I. The correct use of capital letters (beginning of sentences and for proper nouns) and end punctuation.

