

SUBJECTS: Science, Social Studies, Language Arts, and Mathematics

GRADES: 4-5
KERA GOALS: Meets KERA goals 1, 2, 3, 4, 5, and 6
ACADEMIC EXPECTATIONS: make sense of various messages to which they listen; organize information and the use of classification rules and systems; understand scientific ways of thinking and working; identify, analyze, and use patterns; understand the democratic principles; show their ability to become self-sufficient individuals; show their abilities to become responsible members of a family, work group, or community; organize information to develop or change their understanding of a concept; use a decision-making process to make informed decisions; connect knowledge and experiences from different subject areas; and use what they already know to acquire new knowledge, skills, or interpret experiences.

DURATION: One class period of 25-30 minutes
GROUP SIZE: One or two classes of 10-60 students
SETTING: Indoors or outside at tables
KEY VOCABULARY: PARKO, classify, and the included word list

ANTICIPATORY SET: Has any one heard the term "cover all" before? It comes from a game we know as BINGO. Today we are going to play "PARKO" and it is going to cover all the areas we know about Mammoth Cave National Park.

OBJECTIVES: The students will be able to: 1) recognize various words and their relationship to Mammoth Cave National Park; 2) classify various words into their correct category.

## MATERIALS:

- Pencils,
- PARKO cards
- word list
- chips or beans
- word list words on cards
bowl
BACKGROUND: As a culminating lesson to the fourth and fifth grade curriculum, we have pulled various words from earlier lessons that address the following areas:

P- PLANTS
A- ANIMALS
R- ROCKS
K- humanKIND
O- $\mathrm{H}_{2} \mathrm{O}$
This gives the students a chance to review and reinforce various topics from earlier lessons.


## COVER ALL!

## PROCEDURE:

1. The teacher asks if the students have played BINGO before. The teacher tells the students that today we are going to play a new form of that game. We are going to play PARKO. The teacher writes the letters P A R K O on the blackboard. Then they ask the students, "What big topic might each letter stand for? What things do we think of when we think of a National Park or of Mammoth Cave National Park?"
2. The students try to identify the topics. The teacher may want to remind the students to think of the patch that the rangers wear on their sleeves. The teacher offers clues or help as needed.
3. Each student is given a card and a word list. The students are to take the word list and fill in words in the appropriate columns. The teacher may give an example like limestone is a .... rock, so it goes in the $\mathbf{R}$ column for Rocks.
4. After the student's cards are created the teacher pulls the various words from a bowl. As the students find the words on their card, they cover them. Once a student gets five in a row, four corners, or covers all depending on the rules for that game they yell "PARKO".
5. When a student yells, "PARKO" they must then read the column title and the word ( example K- Stephen Bishop). The word must be appropriate to the column's title to count. To win, the student has to share one thing they have learned about Mammoth Cave. For exampleLimestone would need to be in the R-Rock column, if it was under K- humanKind it would not count.
6. The class can play several rounds. As a "prize" for getting "PARKO" the teacher can allow that student to pick the cards for the next round.
7. The teacher collects the cards to evaluate the students' skills in classifying their words.

CLOSURE: This activity helped us to review many of the words we have talked about while studying about Mammoth Cave National Park. It also helped us to classify words in various categories.

EVALUATION: The teacher is able to evaluate the students by how well they create their cards and classified their words.

## EXTENSIONS:

1. Play the game again, but this time they must tell why each word that they had covered to win is important to Mammoth Cave.
2. The class plays PARKO. At the end of the last round the students have to take each one of their covered words and write a story including those words.


## COVER ALL! • WORD LIST

| Tulip Poplar | Stephen Bishop | Oak | Limestone | Non-Point Pollution |
| :---: | :---: | :---: | :---: | :---: |
| Christmas Fern | White-Tailed Deer | Prehistoric People | Claude W. Hubbard | Cave Owners |
| Sandstone | Beaver | Groundwater | Springs | Wood Violet |
| Raccoon | Dogwood | Cave Fish | Longhunters | Caprock |
| Red-Tailed Hawk | Floyd Collins | Floods | Dye Tracing | Watershed |
| Matt Bransford | Green River | Cedar | Black Bear | Sinkhole |
| Calcite | Stalactite | Box Turtle | Redbud | Acorn |
| Wild Turkey | Fossils | Visitors | Turbidity | Dr. John Croghan |
| Great Horned Owl | Echo River System | Little Brown Bat | Disappearing Streams | Gypsum |
| Park Ranger | Cave Cricket | Sycamore | Column | Daffodil |
| Flowstone | Scientist | Hickory | Pioneers | Crayfish |
| Cane Reed | Hydrology | Stalagmites | Point Pollution | Buffalo |



