Alien Astronauts



Animal Life Styles

Science

Science

Imagine a woodland or city park. What animals might live there? Where would you find them? Discuss the characteristics of a natural park with the students. Have them talk about the human-made and natural structure, the kinds of plants, and other features one might find at the park. Give the students a chance to create a large mural of the park that they have described.

Next, provide copies of the animal pictures on page 94 for each student. Have them color and cut out the animals. Next, students should place the pictures on the mural in the places they think you would be most likely to see each one. (Double-sided tape works great.)

When the animals are all in place, ask the students what they see and what they have learned. They might describe the characteristics of the animals and why they are found where they are. Animals can be sorted by size, by physical characteristic, by ecological niche (where they are found in the park), behavior, or any other characteristic that they children feel is important. You might have the students count each animal and make a chart or graph showing the results.

Where Do the Animals Live?

Make copies of pages 95 (farm background), 96 (zoo background), and 97 (animals). You will need one set for each student in class. Have students color the backgrounds and animals. Then students should cut out all the animals, sort them, and paste them in the correct "home." Have a discussion about the types of animals that belong in a zoo, versus the type of animals that would live on a farm.

While children are finishing their worksheets, print out extra copies of page 97. Post two large sheets of heavy paper and have the class create one pictograph showing farm animals and zoo animals. Then sort the animals by size and create another pictograph showing large animals and small animals. Encourage the students to talk about the location of the animals, and sort and count the animals. This will reinforce their mathematical thinking. Encourage students to talk through the placement of animals and count animals when the pictograph is completed to reinforce mathematical thinking.

Bean Counter

Mathematics

What kinds of beans are there? Show the students a package of dry bean soup beans. Ask them how many different beans are there. Pass the bag(s) around the class. Be sure to warn the students to be very careful of the bag so it does not break.

Working in pairs or small groups and with trays to hold the beans, students sort the beans and record the number that they discover. The numbers are collected from all groups and entered on a chart or graph for all to see. Discuss what the students have learned about beans from this activity and record the results on a chart.

As an extension, place individual types of beans in small opaque cans or plastic jars. Have the students shake the jars and listen to the sounds. See if they can rank the size of the beans by the sounds that they make when shaken.

Graph the Class

Print out several copies of the graph on page 98. If you have the capability, you may want to enlarge these graphs for classroom display. Start with graphing the number of boys and the number of girls in the class, using only two of the bars. Label the increments so that you can accommodate the number of students in the class. Have students help count the number of boys and girls and then color in the bars properly. Discuss how a graph can be a "picture" of the class or any other topic you are counting. You may wish to prepare a graph of the class next to yours and see what the students can learn. They could then visit the class and compare themselves and the graphs.

Have the students decide what other characteristics they would like to study and graph. They might consider their favorite types of pets, or months (seasons of the year needs only four bars) of their birthdays, or number of siblings. You may wish to create a graph of some characteristic (sex of teachers, breakfast foods eaten in a month, students in each grade) and have the students describe what they have learned. Finally, discuss the value of graphing data and what they can show or learn.

What's for Dinner?

Talk to students about the foods that they need to stay healthy: fruits, vegetables, grains, milk products, and meat and beans. Display a list of foods in these five groups on the board. Explain why these foods are more important than sweets and "junk" foods, which should be eaten only in small amounts. Hand out copies of page 99 and show children the food pyramid. Hand out magazines and ask students to find and cut out pictures of good foods in each category. (Make sure that blunt scissors are used.) Have the students sort the foods into the five food groups. You might wish to have a "junk" food group so students can discover just how many ads are for processed foods.

Students can then paste food pictures into the pyramid in the correct sections. Alternately, they may draw pictures of food directly on the sheet. Have them circle their favorite food in each category.

What's Different?

Talk to the class about the importance of paying close attention and looking at details. Bring out a tray (prepared ahead of class) containing about a dozen articles commonly found in the classroom, such as scissors, pencil, eraser, paper clip, small tablet, pen, crayon, and so on. Walk slowly around the classroom and tell each student to look carefully at the tray. Then put the tray away and ask students to name things that they saw on the tray. Try the experiment again, changing the articles slightly. Can the students tell you what was different the second time? Then hand out copies of page 100 and ask students to look at the two versions of the picture, circling six differences on the right side. The picture shows two similar versions of a "busy" scene. The version on the right side should have six items not present on the left.

Science

Problem Solving

Word Graph

Language Arts/Problem Solving

Use data (information) to complete a graph. Construct a large blank graph on the chalkboard, whiteboard, or large chart paper. Name the graph, "Word Graph." The x-axis (the vertical line) should be labeled "Number." The y-axis (the horizontal line) should be labeled "Kinds" and have three places for bars: color, shape, and size. Write the following words on cards: yellow, blue, red, green, purple, orange, circle, square, triangle, diamond, rectangle, tiny, small, medium, and large.

Have students select a card and place it on the graph on the appropriate bar with tape. When all cards are in place, discuss the results with the students. What have they learned from the graph?

To continue the activity, post another blank graph and have the students list words and topics they want to examine. Some suggestions might include people, places, animals, pets, and/or foods. The x-axis should always represent the number of each category and the y-axis contains the topics or groups.









Use with "Where Do the Animals Live?" (page 91).



Use with "Graph the Class" (page 92).

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What's Different?





Use with "What's Different?" (page 92).