**Lesson Description**

In this lesson, students list the things that they want at their zoo. They learn that wants are wishes (desires) for goods (items) and services (activities) that satisfy people or make people happy. Students learn about classifying things into groups. Then they classify stuffed animals as mammals, fish, reptiles, amphibians or birds. Teachers may reduce the number of animal classifications.

*Note: Before beginning this unit, read “Tips for Teaching Do a Zoo” on page vi and “Notes for Building a Classroom Zoo” found on pages vii – ix of the unit.*

**Economic Concepts**

- wants, goods, services

**Objectives**

Students will be able to:

1. define and give examples of wants.
2. define and give examples of goods and services.
3. explain that wants are never ending (unlimited).
4. explain that people can’t have everything they want.
5. classify animals and state characteristics for classification.

**Materials**

- copy of Activity 1.1 for each student
- chart paper or transparency
- marker or overhead pen
- book, pencil, box of crayons, backpack, candy bar, “Movie in a Theater” written on a piece of construction paper, picture of someone visiting the doctor or “Doctor’s Care” written on a piece of paper, picture of a bus or “Bus Ride” written on a piece of paper, “Bike Repair” or “Dry Cleaning” written on a piece of paper
- 3 decks of cards – each with a different design on the backs; shuffle all cards together; divide cards into stacks of 13
- transparency of Visual 1.1
- copy of Activity 1.2
- five pieces of chart paper
- tape or magnets to hold charts
- stuffed animals
| Preparation | Before beginning this unit, send a copy of Activity 1.1 home with each student. The letter informs parents about the unit and asks that students be allowed to bring stuffed animals to class for this project. The chart paper or transparency will be used to list the wants students have for their zoo. Save the list of wants for lesson 8. Label five pieces of chart paper with the headings “Mammal,” “Fish,” “Reptile,” “Amphibian,” and “Bird.” Next to the heading, glue the appropriate picture from Activity 1.2. |
| Time Required | 3 to 4 class periods (approximately 120-180 minutes) |
| Procedure | Part I: Wants |
| Procedure | 1. Tell students that they will design and build a zoo in the classroom for kindergarten, first, and second graders to visit. Parents and younger siblings may visit, too. Suggest that students think about times when they have visited a zoo or seen pictures of a zoo. Discuss the following. |
| Procedure | a. What were some things you saw? (animals, animal shows, train ride, video, gift shop, refreshment stand) |
| Procedure | b. What were some things you liked? (Answers will vary.) |
| Procedure | c. Would you like these things at your zoo? (Answers will vary.) |
| Procedure | 2. Allow students to share things that they would like in the zoo. Accept all ideas, including every kind of animal. As children respond, record suggestions on the chart paper or transparency. |
| Procedure | 3. When suggestions have been given, explain that these are the things that the students want in the zoo. Write “Wants” at the top of the list. |
| Procedure | 4. Tell students that you hope they can have everything that they want for their zoo because it would be a spectacular zoo. Explain that it would be very surprising if they were able to have everything they want. |
5. Remind students that things on their list are their wants for the zoo. Divide the students into pairs. Have students brainstorm to define the word “wants.” Allow pairs to work for about a minute. Have pairs share their ideas with the class. Record suggestions on the board. Then explain that wants are wishes that can be satisfied by consuming a good or using a service.

6. Explain that goods are items that people can touch and take with them. For example, a pizza and a soccer ball are goods. Define services as work or tasks that people do for us. For example, if the school nurse helps sick children, she provides is a service. When a janitor cleans the classrooms, he provides a service. People can’t carry services home with them.

7. Display the goods and services (see Materials on page 1) on a table. Explain that each physical item is a good. Hold up each picture or word written on paper and explain that each of these represents a service.

8. Create two columns on the board. At the top of one column write “Goods.” At the top of the other column write the word “Services.”

9. Invite a student to come to the table. Ask if s/he buys a pencil, does s/he get to take it home and use it. (Yes.) Ask the class if a pencil is a good or a service. (good) Have the student take the pencil and stand in front of the board under the word “Goods.”

10. Ask a second student to come to the table. Ask if s/he goes to a movie in a movie theater, does s/he get to take the movie home and use it. (No.) Ask the class if a movie at the theatre is a good or service. (service) Have the child tape the paper with the word “Movie in a Theater” on it to the wall, and then stand in front of the board under the word “Services.”

11. Continue until each item or picture/paper on the table has been classified as a good or service. Discuss the following.

   a. What do the children in the “Goods” column have that those in the “Services” column don’t? (They are holding things.)

   b. Why are they holding things? (They are holding things because goods are things that we can touch and use.)
c. Why aren’t people in the “Services” column holding anything? (They aren’t holding things because services are things people do for us. We can’t carry services around.)

d. Name some goods that you used yesterday. (pencils, crayons, clothes, comb, brush, toothbrush, backpack)

e. Name some services that you used yesterday. (school bus ride, talked on the phone, after-school care, teaching)

12. Remind students that the list of wants for their zoo is very, very long. Explain that if they thought for several more days, they could add more wants to the list. This means that their wants for the zoo have no end (are unlimited). Explain that people’s wants for goods and services have no end (are unlimited).

13. Ask students to pretend that it is their birthday. Tell them to think about all the things they want for their birthday. Allow time for students to share ideas.

14. Tell the students to pretend that they received everything on their list. Discuss the following.

   a. Grandma still hasn’t given you a present for your birthday. Name something else that you want. (Most students will be able to name at least one more thing.)

   b. Pretend that you received the gift from your grandma, but now your Aunt Susan wants to give you something. Name one more thing that she could give you. (Most students will be able to name at least one more thing.)

15. Explain that most people can always think of more things that they want. This means that their list of wants is unlimited or never-ending.

**Part II: Sorting Objects by Attributes**

1. Tell students that they will learn about grouping things that are alike in some way.

2. Remind students that earlier they put things into two groups – goods and services. Discuss the following.
a. What was alike about the things in the “goods” group? (All goods were things that could be touched or carried.)

b. What was alike about the things in the “services” group? (All services were things that couldn’t be touched or carried; all were work or tasks that people did for other people.)

3. Explain that another way of saying that things are alike is to say that things have the same qualities. For example, services have some of the same qualities; they can’t be touched or carried, and they are all tasks that someone does for others.

4. Divide the class into pairs. Explain that each pair of students will receive a stack of playing cards.

5. Distribute stacks of cards to pairs of students, and explain that each card has a design on the back and a picture or number on the front.

6. Explain that the pictures/numbers on the front of the cards are either red or black, and that some of the cards have hearts on them, some diamonds, some spades, and some clubs. Display Visual 1.1 and have students identify each shape.

7. Explain that students should work with their partners to decide ways in which the cards could be grouped or categorized.

8. Allow time for pairs to work. Have each pair answer the following questions.

a. How many categories/groups did you have for cards? (Answers might be two, three or four – or more if they sorted by number/picture.)

b. What was alike about the cards that you placed in each group? (color, design on back, number or picture, shape on front)

9. Explain that different pairs of students categorized the cards differently. However, each pair identified things that were
alike about certain cards in order to group them. For example, some pairs noticed that cards were alike in color, numbers, card designs, or by suit.

10. Remind students that an important want that they had for their zoo was animals.

11. Place all the stuffed animals in the center of a large area. Hang the five, labeled pieces of chart paper on the walls.

12. Explain that just as students placed cards into groups or categories, scientists place animals into groups or categories. The animals in a group have some qualities that they share – things that are alike about them. Tell students that they will learn about five animal groups.

13. Point to the picture of the fish. Explain the following points and write them on the fish chart.

X Fish are animals that live in water all the time.
X They usually have long, flat bodies.
X They have fins to help them swim, gills that let them breathe in water, and scales on their bodies.
X Catfish, sharks, tuna, and bass are examples of fish.

14. Choose a fish from the pile. Explain that this animal is a fish because a real (animal name) has fins, lives in water all the time, and has scales (Even though a stuffed fish might have fur, real fish have scales.) Place this animal under the fish chart. Discuss the following.

a. Do you have fins? (No.)
b. Do you have scales? (No.)
c. Do you live in water? (No.)
d. Are children/people fish? (No.)

15. Point to the picture of the bird. Explain the following points and write them on the bird chart.

X Birds are animals that have feathers, two legs, wings, and beaks.
X  Birds lay eggs.
X  Birds may or may not fly.
X  Flamingos, robins, geese, and penguins are birds.

16. Choose a bird from the pile. Explain that this animal is a bird because a real (animal name) has two legs, a beak, and wings. In real life, it would have feathers, too. Place this animal under the bird chart. Discuss the following.

   a. Do you have feathers? (No.)
   b. Do you have two legs? (Yes.)
   c. Do you have wings? (No.)
   d. Do you lay eggs? (No.)
   e. Are children/people birds? (No.)

17. Point to the picture of the reptile. Explain the following points and write them on the reptile chart.

   X  Reptiles crawl across the ground or creep on short legs.
   X  They have dry skins, backbones and scales or horny plates.
   X  Reptiles lay eggs.
   X  Snakes, lizards, alligators, and crocodiles are examples of reptiles.

18. Choose a reptile from the pile. Explain that this animal is a reptile because a real (animal name) crawls on the ground or has very short legs. This animal has a backbone. This animal does not have fur; it has scales or horny plates. (Even though a stuffed reptile might have fur, real reptiles do not have fur.) Place this animal under the reptile chart. Discuss the following.

   a. Do you have a backbone? (Yes.)
   b. Must you crawl on your stomach to move around? (No.)
   c. Do you have very short legs compared to the rest of your body? (No.)
   d. Do you have scales or horny plates? (No.)
   e. Are you a reptile? (No.)
19. Point to the amphibian chart. Explain the following points and write them on the amphibian chart.

X Amphibians are animals that have backbones and moist skin.
X When they are young, they live in water and breathe through gills.
X When they grow up, they develop lungs and live on land near water.
X Frogs, toads, and salamanders are amphibians.

20. Choose an amphibian from the pile. Explain that this animal is an amphibian because a real (animal name) has a backbone. It lives on or near water. This animal does not have fur. (Even though a stuffed amphibian might have fur, real amphibians do not have fur.) Place this animal under the amphibian chart. Discuss the following.

a. Do you have a backbone? (Yes.)
b. When you were a baby did you live in water and breathe through gills? (No.)
c. Do you have moist, damp skin? (No.)
d. Are children/people amphibians? (No.)

21. Point out that students have determined that they aren’t fish, birds, reptiles, or amphibians. Ask if there is a poster for an animal group that hasn’t been discussed. (Yes.)

22. Point to the mammal chart. Explain the following points and write them on the mammal chart.

X Have backbones.
X Mammals are animals that have fur or hair.
X They feed their young milk and have backbones.
X Lions, dogs, monkeys, and whales are examples of mammals.

23. Discuss the following.

a. Do you have a backbone? (Yes.)
b. Do you have hair? (Yes.)
c. Did your parents feed you milk when you were young? (Yes.)
d. Are children/people mammals? (Yes.)

24. Choose a mammal from the pile of animals. Explain that the animal is a mammal because a real (animal name) has fur, a backbone, and feeds its young milk. Place this animal under the mammal chart.

25. Have students sit on the floor forming a circle around the pile of animals.

26. Select two students. Have each student choose an animal from the pile. Have one student stand and the other sit. Ask the student, who is standing, the following questions.

a. What animal have you chosen? (Answers will vary.)
b. Do you think that this animal is a mammal, fish, amphibian, reptile, or bird? (Answers will vary.)
c. Name one characteristic that makes the animal fit in that group. (Answers will vary.)

Note: If a student is uncertain of the animal family or can’t name a characteristic of that family, allow the student to discuss it with another student. When they’ve decided, the first student should state the answer.

27. Tell the student to put the animal under the correct chart.

28. Have the second student stand with his or her animal. Tell another student to select an animal and sit down. Ask the standing student the questions from procedure step #25. Tell the student to put the animal under the correct chart.

29. Continue this process until all animals have been categorized. Encourage students to name different characteristics for the animal families – mammals, birds, amphibians, reptiles, and fish.

Note: Students are less distracted if they choose one animal as their turn nears. It may be necessary to take a break halfway through the activity. This will allow students to get...
Animal Groups

Do A Zoo
Lesson 1

up and move around. Depending on the number of animals
to be classified, students might have more than one turn.

Closure
Review the important points of the lesson by asking the following questions.

1. Do people want many, many things? (Yes.) This means that people’s wants are never-ending or unlimited.
2. What is a good? (A good is an item or thing that people use, and can touch and see.)
3. Name a good that you have in school today. (pencil, paper, shoes, socks, shirt)
4. What is a service? (A service is an activity someone does for us.)
5. Name a service someone has done for you. (cut hair, fixed bike, baby-sat)
6. What are the names of the animal categories or groups that we learned about? (mammals, birds, fish, amphibians, and reptiles)
7. What are some characteristics of mammals? (fur or hair, feed milk to their young, backbone)
8. Give examples of mammals. (lion, tiger, bear, fox, wolf, whale, dolphin)
9. What are some characteristics of a bird? (feathers, two feet, wings, beak, lays eggs)
10. Give examples of birds. (robin, goose, toucan, parrot, eagle, hawk)
11. What are some characteristics of fish? (scales, long flat bodies, gills, fins, live in water)
12. Give examples of fish. (catfish, shark, tuna)
13. What are some characteristics of amphibians? (have backbones, live in or near water, start out with gills and develop lungs)
14. Give examples of amphibians. (frog, toad, salamander)
15. What are some characteristics of reptiles? (scales or horny plates, four legs, backbone, lay eggs)
16. Give examples of reptiles. (crocodiles, alligators, turtles, lizards, snakes)
Visual 1.1 Playing Card Suits

- Heart
- Spade
- Club
- Diamond
Dear Parent(s),

Our class is beginning an economics unit, “Do a Zoo.” In this unit, students will design a zoo in the classroom. Through activities related to designing the zoo, students will learn about animal classification and animal habitats. They will also learn about goods and services, decision making, opportunity cost, resources, and production.

In order for the unit to be successful, students are asked to bring stuffed animals to school. These should represent mammals, fish, reptiles, amphibians, or birds. They may bring as many stuffed mammals, fish, reptiles, amphibians, or birds as they wish. The more animals that are available, the better the opportunity to build a great zoo.

The students must understand that they may not be the ones to create the habitat for the animal(s) they bring. Also, they must be aware that accidents may happen, and they should be willing to accept the possibility that something may happen to their stuffed animal.

As your child decides which animal(s) to bring, please do not provide any judgements regarding the quality of the animals. The class will make decisions regarding the characteristics of the animals wanted in the new zoo.

Please help me by making certain that each animal your child chooses to bring is clearly labeled with your child’s name. You may wish to use a permanent marker to put the child’s initials on the tag. Another option is to place a piece of masking tape over the manufacturer’s tag and write your child’s initials on the masking tape.

To design the zoo, we need:

- empty copy-paper or other boxes
- large appliance boxes
- blue cellophane
- paper lunch bags
- plastic gloves
- yarn

- green crepe paper
- paper towel rolls
- dried leaves
- pine cones
- acorns/nuts in the shell

Please consider saving these items and sending them to school for our project. Also, we need parent volunteers to help us build our animal displays. If you will volunteer, please let me know.

For special attractions, we will need to borrow at least one student’s wagon. We will also need donations of cartons of lemonade and bags of popcorn. If you will donate these items, please let me know.

Thank you for your help in marking the animals and getting them to school. We’ll let you know when our zoo is open for public viewing. I hope that you’ll be able to visit the zoo when it is open! This is a very exciting project and your child will be proud to share it with you.

Sincerely
MAMMAL
FISH
BIRD
REPTILE
AMPHIBIAN