

Everything Has Parts

Summary

Students will understand that non-living things are made of parts.

Materials

Different sets of building materials for each table (Jenga, blocks, Legos, etc.)

- [Blackline of the house with individual parts cut into pieces](#)

(enlarged to an 11"x17" size) (pdf)

- [Picture cards](#) (pdf)

from the attached blacklines, copied on cardstock and cut into cards

Several pictures of non-living things (enough for each student to have one or two)

Equipment Needed: Something to hold the house and its parts (blackboard, easel, etc.): magnets or tape

Books:

- *Teddy Bears, From Start to Finish*

, by Tanya Lee Stone ISBN: 1567114792 /9781567114799 / 1-56711-479-2

Articles:

"Kindergarten Science: What to Expect," *Parent and Child Magazine: Read for Kindergarten?*

Organizations:

- [National Science Foundation](#)
- [National Science Teachers Association](#)

Background for Teachers

Students will need to understand the difference between a living and a non-living thing prior to this lesson. This lesson is specifically designed to show that non-living things are made of parts. Then, through demonstration, those parts will be taken away and students will be able to see how their function changes. (This lesson is only an introduction to this concept. In the additional lesson activities section, there are several ideas to extend this lesson.)

Instructional Procedures

Invitation to Learn:

Launch (Introduction): (10 minutes)

Students will sit in a circle as the teacher models how to build a tower with building blocks.

Engage the students in building the tower, adding one part at a time. Draw attention to the "parts" that are being used to build the tower.

Demonstrate that when you take away the parts of the tower, the tower can't stand up -- it falls because some of the parts are missing.

Explore (Individual and Small Group work): (5 minutes per rotation)

Students will return to their tables and in small groups build a tower with the building materials at their table (blocks, Legos, Jenga, etc.).

After they have built a tower, have them each in turn start taking away a part of the tower until it is no longer a tower.

Have children rotate through the different tables and build and take away the parts of the several different building materials.

Discuss (Whole Group Discussion): (10 minutes)

At the carpet, discuss with the children the following questions:

What was the tower made of (parts of blocks, Legos, etc.)

What happened when we took away some of the parts? (It eventually fell.)

If the parts are missing, is it still a tower? (No-it changes.)

Explain to the students that you are going to look at the parts of a house.

Show students the picture of the blank house (see attached blacklines). Name all the parts of the house and their functions as you put the pictures on the house.

After all the parts are on the house, take away a part and discuss how the house would be different if the "door" or "window" wasn't there.

Solidify (Closure): (5 minutes)

Review that all things have parts. Even things in our classroom have parts. Name the parts of an object that you use frequently in your room. Discuss how the object would change if it didn't have all of its parts.

Play the "What If" game.

Students sit at the carpet.

Teacher give the scenario and the children answer:

What if a chocolate chip cookie didn't have chocolate chips in it?

What if a peanut butter and jelly sandwich didn't have peanut butter on it?

What if your classroom didn't have tables and chairs?

What if your bed didn't have a mattress?

What if the lunchroom didn't have tables?

What if your car didn't have wheels?

What if your bike didn't have any pedals?

Practice (Review): (15 minutes)

Copy the pictures cards from the attached blacklines on 8_"x11" white cardstock. The pictures are divided into parts. Each student will receive one picture. The teacher will read the clues from the attached [clue list](#) (pdf). One student will have the card that represents the first part of the clue, and another student will have a card that represents the second part of the clue. Each student will look at the parts and try to match his/her part with the other student. Continue in this way until all students have matched their parts. Note: This can be done several different times during this unit and would make a great center pocket chart activity for extended practice.

Additional Lesson Activities:

Mystery Part on Picture Card:

For this activity you will need several pictures of non-living objects. Hand one picture out to each student. Choose one picture that you want to be the mystery card. Give students clues as to the mystery object on the card by naming some of its parts. Students will stand up if they have the part on their picture, and sit down when they don't have all the parts talked about. For instance: If the mystery card I chose was a truck, I would say, "I have a round part." Students would look at their cards and identify something round. The next clue might be, "I have a part that gives light." Students who don't have this part must sit down. Continue with clues until only one student is standing.

Taking Away Parts:

For this activity you will need magazines, newspapers, toy catalogs etc. Each student will choose a picture of a non-living object. Students will cut the picture of the object out. They will then take the object and cut off the parts that make the object. They will glue the pieces on the object on an 8_"x11" sheet of white paper and label the parts.

Whole group connections can be made by observing how the object is not the same without the part that the student cut off. Have students show the picture cut into parts and predict what the object is from the parts. Questioning can be in this type of format: "If you cut off the legs of the chair, does it still work like a chair?"

Stuffed Animal Experiment:

Begin this activity by reading the book *Teddy Bears, From Start to Finish*, by Tanya Lee Stone.

NOTE: If you don't have this book, you may want to draw teddy bear parts of a teddy bear, and how those parts make a bear when they are all put together.

Show a teddy bear and do a whole class discussion about the "parts" of this toy. She will then show the students how she has opened up the teddy bear and now you can see the parts on the inside. As the students discuss the parts of the bear, the teacher can ask what part doesn't need to be on the teddy bear (none-all the parts are necessary). What if it didn't have a head? What about eyes, or arms? Would it still be a teddy bear?

Have students return to their tables, where there is a different stuffed animal on each table. Each student will be given a task (draw head, torso, legs, arms, etc.) and then they will label the parts of their animal on a large sheet of paper.

Students will return to the carpet with their pictures (sitting in their table groups). As a group, they will discuss their pictures and the parts that made up their stuffed animal. Reinforce how all the parts are needed in order for it to be that "toy" or "animal." Note: You could do this with any type of toy that has parts.

I Spy The Parts Game:

Play a guessing game like "I Spy." Describe a familiar object in the indoor or outdoor setting. Ask the children to guess the object based on the parts you list and describe. Can students find, point to, or touch the object in question? Ask the children to take turns as they, with teacher help, describe an object and have their classmates guess the item by the description of its parts.

Mystery Bag Item:

Place an object in a brown bag. Suggested items might be a truck, a dish, a doll, a book, etc. Have a group of students come and feel the object. Have them tell you what the object is upon their feeling it. Write or draw the object they have described on chart paper. After several students have guessed, reveal the object and involve the group in carefully re-examining the item and talk about its characteristics and parts.

Ask probing questions such as:

How many parts make up the object?

What would happen if the _____ was missing? How would this change the object?

Would this still work if not all the parts were there?

Literature Connection with Letters and Worlds:

Put up a known three-letter word with magnetic letters on a whiteboard. Ask the students the name of the word. Slowly break the letters out of the word by sliding them to the left, one letter at a time, then run a finger under the word and read it. This is to demonstrate that words are made up of parts.

Ask the following questions:

How many letters are in this word?

Where is the first letter in this word?

Where is the last letter of this word?

If I took away this letter would it still be a word?

This word is made up of three letters. If we take away one of these letters, it doesn't work the same way.

The teacher can also take a multi-syllable name of one of the students and write it on a sentence strip. As a class, the teacher and students clap the syllables or parts of the name. The teacher then cuts the name into parts and has the students read the parts of the name with you.

Ask the following questions:

Whose name is this?

How many parts did we hear in this name?

Where is the first, second and last part of the name?

What would happen if I took away this part of the name? Would it still be the same name?

This name has parts in it; if we take away some of the parts, it is not the same name.

Finding Parts of an Object in a Book:

For this activity you must have different books that have large pictures of objects like balls, playground equipment, rocks, homes, food, etc. Give a pair of students a book and a large "[looking glass](#)" (pdf). Copy the 'looking glass' onto 8 1/2"x11" cardstock, cut out the small square in the center, and laminate. The "looking glass" is large enough that it will completely cover the page of the book, and only have a small area to look through. One student will look at the picture and choose an object for the other student to identify. The other student will try to find out what the picture is by just observing parts. The partner will observe him/her until he/she guesses correctly. The partners will continue taking turns with the looking glass and identifying objects by only looking at small parts. This would be a wonder center.

Extensions

Advanced learners can identify the parts that make up specific items in a classroom and draw and label the parts on paper. They would choose one classroom object and then describe its parts, and exactly what parts are needed. For example, a book has pages, letters, words, pictures, and a cover.

For special accommodations, teach using the picture cards, review vocabulary and have parent helpers review the cards and the house. The picture cards should be helpful for English Language Learners.

FAMILY CONNECTIONS:

Assignments to Do With Parents:

Students will discuss with their parents the things that make up their bedroom. What if they didn't have a bed, a dresser, or a closet? How would their room be different?

Students can discuss the parts of their bike. What if it didn't have wheels, pedals, or a handlebar?

Students could take a blank 8 1/2"x11" piece of white paper home and draw their kitchen. Have students label the parts of their kitchen. What if there wasn't a sink, a fridge, or an oven?

Students would explain what would happen in their kitchen if those items were missing. Where would they put food, cook food, wash dishes, etc.?

Assessment Plan

Informal assessment could consist of observing students during the "building" and "taking away" activity.

Informal Assessment: Do the students understand that things are made of parts, and that parts can be taken away? Were they able to match the parts of the picture cards?

Formal Assessment: Give students a blank 8 1/2"x11" sheet of white paper. Explain that the blank paper represents a classroom without anything in it. They should draw the things they would need in order to have an empty room turn into a classroom. What are all the parts that make up a classroom?

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