Activity

I Spy a Simple Machine

Grades: PreK–K

Overview
Starting from labeled paper models of simple machines, kids set out to find examples nearby… then make a Simple Machine Chart.

Materials:
- glue
- chart paper
- scissors
- paper
- markers

In Advance:
Place these "six simple machines" in a box: wheel, lever, pulley, inclined plane, screw, and wedge. Explain to children that they are going to learn about simple machines. Make a chart with the six simple machines drawn and labeled for children to use as a reminder. Let children know they will investigate simple machines and will find them all around the room. Did children know that all machines are made from these six simple machines?
ACTIVITY

Take the machines out one at a time and share what each does. Talk about how machines cannot work by themselves but need people or power (such as wind, air, electricity, heat) to make them work. Discuss how a machine usually makes work easier for us. Pass out pencils and paper to children.

Arrange children in pairs. Invite children to walk around the classroom and find as many simple machines as they can. Ask children to draw the items that use the simple machines. Examples: The block area has many inclined planes; trucks/cars have wheels; the pencil sharpener has a crank and a screw. In addition, keep in mind that furniture has many screws and wedges; toys in the water table might be simple machines; scissors are levers and wedges; the plastic knives we use for snacks are wedges; a nail is a wedge. Set a time limit on this activity so children stay focused and know they need to get the job completed in order to share what they find.

Make a "simple machines" chart to hang up with children's work.

Remember: Children of this age are ready to learn scientific vocabulary and will retain it when it relates to something in their own lives. Provide plenty of opportunity for children to talk to each other.

FAMILY EXTENSION

Have children bring in a toy from home that uses one or two of the simple machines. Invite children to bring the toy to class for show and tell.

Linked Activities

Taking things apart to see how they work is an activity all children love. Place a few discarded machines (phone, toaster, alarm clock, tape player, old radio) on a table with pliers and screwdrivers. Show them how to use tools safely and practice with each child. Encourage children to take apart the appliances. What simple machines do they find? Make sure to safety-proof all machines before putting them out for children.