

Changing Shape

Summary

A solid has its own shape. A liquid takes the shape of its container. A gas can change shape and size. Matter changes in different ways. Force can change the shape of matter. You can hit a solid to break it into pieces. You can pull and stretch a balloon. You can bend, pull, and push clay to make new shapes. You can squash it and roll it and shape it again. Some solids, such as metal, are very hard. The metal must be heated before people can shape it.

Before Reading

Take a Picture Walk

Build background for the book by taking a picture walk with children. Discuss the pictures and preview the key vocabulary and concepts. Invite children to tell about times they have changed matter in some way.

Vocabulary

dissolve, evaporate, gas, liquid, mass, matter, solid, force, hammer, metal, noodles, squash, squeeze, stretch

Comprehension Skill: Alike and Different

Say: We can describe things by telling how they are alike and different. As you read, think about the different ways we shape matter and how are these ways alike. How are they different?

During Reading

Think Critically

Have children answer the *What Did You Learn?* questions located on the inside back cover of their book.

- 1. How does matter change shape?** Force can change the shape of matter. Matter can be broken into pieces, stretched, heated, and/or cooled.
- 2. What are three ways your hands can change the shape of matter?** Possible answer: bend, push, pull, stretch, squeeze, twist, bend, roll, and squash.

After Reading

Writing in Science

Heat can change matter. Write to describe some ways heat can change matter. Use words from the book as you write.

Organize Information

Graphic Organizer: Alike and Different
Have children complete the Alike and Different chart on the BLM for this Leveled Reader to tell how the shape changes of noodles and suspenders are alike and different.

Related Resources

Vocabulary Cards	Equipment Kit
Every Student Learns	Activity Flipchart
Quick Study	LabZone
Big Book of Science Songs and CD	
Graphic Organizer Transparencies	
Quick Activity Transparency	
www.pearsonsuccessnet.com	

Write your answers.

1. How can force change the shape of matter?
You can hit, bend, push, pull, or stretch matter to change its shape.
2. What must people do before they can shape metal?
People must heat metal to shape it.
3. What happens when you melt some kinds of matter?
When you cool it?
**Some matter changes from solid to liquid when it melts.
Some matter changes from liquid to solid when it cools.**
4. How are the shape changes of noodles and suspenders alike? How are they different?
Use the graphic organizer to help you.

Possible answer:

Alike

Different

<p>Both can be stretched.</p>	<p>Suspenders change back when you let go of them.</p>
--------------------------------------	---