



Topic: Shape

Constructing using familiar three-dimensional objects

Lesson concepts

- Shapes Language (describing, naming, comparing)
- Shapes Sorting (appearance, function)

Today students will:

apply knowledge of familiar shapes to construct a new object.

Resources

Digital

Video — The three bears (3:43)

Find and prepare

Teddy bear

Tea towel or cloth

Classroom/environmental materials

Sheet — Building cards (display electronically or print)

Familiar story such as *Goldilocks and the three bears* (or use the digital story)

Blocks, construction or collage materials

Key terms

cone, corner, cube, cylinder

For definitions and explanations of terms, please see the <u>Glossary</u>.



Lesson

Introduce the lesson

Note

The following language is important to highlight and develop throughout this lesson:

objects, shapes, curved, straight, corners, describe, stack, roll, slide, box, ball, tube

Explain to students that many objects are made out of combinations of three-dimensional shapes.

Explore features of three-dimensional objects

Identify the parts

Display an object such as a teddy bear covered by a tea towel/cloth.

Focus on each part of the covered object by:

- asking students to feel the part
- discussing the shape of the part
- revealing the part
- assisting students to identify objects/construction material that could be used to represent the part, for example: use cardboard cylinders for the arms.

Focus questions

- Q: What shape do you think this is like?
- A: For example: It is a ball shape.
- Q: What does it look like?
- A: For example: It looks round and feels smooth and curved.
- Q: What materials could you use to make that part of the body?
- A: For example: It's like a long cylinder. I could use a long cardboard tube.

Repeat with other parts of the object until all have been revealed.

Ask students to:

- · identify three-dimensional objects that they could use to make their own object (teddy bear)
- make the object (teddy bear) using those objects
- discuss any difficulties or problems that arose while constructing the new object.





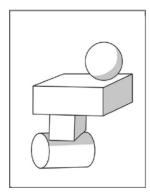
Buildings

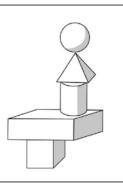
Display the **Sheet** — <u>Building cards</u>.

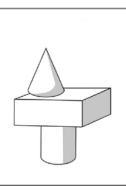
Provide students with materials to recreate these structures.

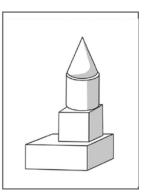
Explain to students that when they are building or constructing objects they must:

- look like what they are creating (for example: a teddy bear construction should be 'teddy bear shaped')
- be able to stand alone (balance)
- may need to use a range of joining methods and materials to hold parts of the construction together.









Focus questions

- Q: Which objects can you see in this building?
- A: For example: a ball/sphere, a can/cylinder
- Q: Why is this object here?
- A: For example: The bigger object is better on the bottom.
- Q: What do you need to think about when you are building?
- A: For example: How the objects will balance.
- Q: Why do you think that curved faces could be a problem?
- A: For example: It might roll off.
- Q: Where are objects with flat faces most helpful? Why do you think that?
- A: For example: At the bottom because you can stack other objects on top of them.
- Q: Could the cone be placed in a different position? Why/why not?
- A: For example: No because if you placed it on its side it would roll off the top.

Ask students to copy each structure.



Build an object

Watch Video — The three bears or another familiar story.

Explain to students that they will:

- build their own object from the story
- use objects such as blocks, construction or collage materials
- carefully plan which objects they are going to use and how they will join the objects.



Help students to draw a plan of the object that they are going to make, for example: a bear, chair, house, bed, Goldilocks.

Construct using familiar three-dimensional objects

Provide students with three-dimensional objects that they can manipulate and refer to as they plan.



Display shape names for students to copy to label their plans.

Focus questions

- Q: What are you going to make?
- A: For example: the cottage
- Q: Which objects are you going to use (referring to the plan)?
- A: For example: a cube, cylinders
- Q: Why is that object used here? How would you describe this object?
- A: For example: The cube is the shape of the cottage/a square box.
- Q: Why did you choose that object?
- A: For example: It was most like the cottage.
- Q: What else could you use here?
- A: For example: I could use a (rectangular box).

Discuss objects the students have used by referring to their shape.

Allow students to suggest ways to improve their constructions.

