

Getting Ready

OBJECTIVE: Student will identify 3-dimensional shapes.

Materials

Warm Up

- Vocabulary card (*cylinder*, *sphere*)
- small ball, cylinder block
- 2 plastic zipper bags
- geometry cards
- All-Turn-It spinner
- rectangular prism, triangular prism, cube, cylinder building blocks, and small ball

Explore

- poster (In the City)
- Geometry cards
- cube, rectangular prism, triangular prism, cylinder, blocks, small ball,
- food models

Warm Up

A. VOCABULARY REVIEW: *cylinder*, *sphere*

Show/give Concrete Connection: Place *cylinder* block in bag. Label “*cylinder*.” Place ball in bag. Label “*sphere*.” Show “*cylinder*” and “*sphere*” Vocabulary cards.

Say, “**Read** it” for each card.

Students **locate** and **show** examples of *cylinder* and *sphere* using past work, pictures from home, or books.

B. FUN & GAMES: Match the Shape

PREPARATION

Place Geometry cards facedown on the table.

Fasten block shapes (cube, *cylinder*, triangular and rectangular prisms) and ball on All-Turn-It spinner.

DIRECTIONS

Player **spins** to select shape.

Announce the name.

Flip photo cards one at a time.

Player(s) recognizing the shape **say**, “Match!”

Explore

A. POSTER: In the City

Point out three-dimensional shapes on the poster, e.g., post, mailbox, light, and building.

Discuss what you see on the poster and personal experiences; use information from home.

B. TOOLS & MANIPULATIVES

Say, “Let’s explore and name shapes” (*cylinder*, *sphere*, cube, rectangular prism, triangular prism).

Model saying the name of each shape and matching it to food models and Geometry cards.

Students **hold** and **explore** shapes and cards.

OBJECTIVE

Student will identify three-dimensional shapes.

 Materials

 Introduce and Connect

- poster (In the City)
- Vocabulary card (*cube*, *rectangular prism*, *triangular prism*)
- cube, rectangular prism, triangular prism building blocks
- 3 plastic zipper bags

 Teach

- *rectangular prism*, *triangular prism*, *cube*, cylinder, small ball
- food models (fruit, can, pie)
- Geometry cards
- building blocks, pocket chart

 Introduce and Connect

A. EXPLORE POSTER: In the City

Show/give student(s) Concrete Connections: Place each shape in a bag and label “*cube*,” “*rectangular prism*,” and “*triangular prism*.”

Model naming each shape and pointing out examples in the room and on the poster. Direct students to **point** to shapes, e.g., building and mailbox. Students **find** requested items.


B. SHOW & TELL

Ask, “What do you know about *cubes* and *rectangular* and *triangular prisms*?” Students **tell** what they **see** on the poster and what they know. Write student comments on Number Notes poster with words, pic-symbols, and /or objects, etc. Use past student work or items from home when possible. *Note: Objects or pictures can be fastened to the Number Notes poster.*

C. VOCABULARY: *cube*, *rectangular prism*, *triangular prism*


Show *cube* Vocabulary card. Say, “This says *cube*. **Read** it.” Students **say** *cube* three times. A *cube* is a three-dimensional figure with six square faces. Repeat for *rectangular prism* and *triangular prism*. A *rectangular prism* is a three-dimensional prism with six rectangle faces. A *triangular prism* is a three-dimensional figure with two triangle and three rectangle faces.

P In the City


 Sensing Math

- Have a 3-D shape party! Try different kinds of foods in 3D shapes: orange (sphere), juice frozen in ice cube shape (*cube*), brownies (*rectangular prism* or *triangular prism*), and drink juice using straws (*cylinder*). Take pictures of the food examples. Students **label** the food shapes with pic-symbols or words.

Level Guide

 1 Level = Severe

 2 Level = Moderate

 3 Level = Mild

Teach

A. VISIBLE THINKING

Use blocks: *rectangular prism*, *triangular prism*, *cube*, cylinder, small ball, food models, Geometry cards, and pic-symbols to show what you are thinking. *Demonstrate each CSA level twice.*

C

Show ball. Say, “This is a sphere.” Repeat for each block shape cylinder, *rectangular prism*, *triangular prism*, and *cube* (Point out the triangle face on *triangular prism* and rectangle face on *rectangular prism* to help with name.)

S

Show food model fruit. Say, “This is a sphere.” Repeat for can (cylinder), pie (*triangular prism*), tissue box (*cube*), and food box (*rectangular prism*) and match to Geometry cards, naming each.

A

Write and draw sphere, cylinder, *rectangular prism*, *triangular prism*, cone and *cube*. Say each name and say it is a three-dimensional shape. (Option: Use pic-symbols rather than drawings.)

B. TRY IT: Skill Drill Worksheet

Students **mark** shapes as they are named.

Problem Solving

A. DEMO

Martin has a project for math class. He must label each geometric solid shape. A geometric solid is a three-dimensional shape. Help him label them. Place building blocks and Geometry cards on table.

B. SOLVE IT

Name the shapes. Place building blocks, small ball, food models, and Geometry cards on table. Use problem solving steps 1-7.

1
Level

Place block shapes, two cylinders, and a sphere in pocket chart. Say, “Show the cylinder.” Students **choose**. Repeat for all shapes, placing two correct and one foil in pocket chart for each choice.

2
Level

Place shapes on table in a row (sphere, cylinder, *rectangular prism*, *triangular prism*, and *cube*). Name each shape for students to **locate**. Ask, “What is the name of this shape?” Use other examples as a hint.

3
Level

Show each shape and Geometry card (sphere, cylinder, *rectangular prism*, *triangular prism*, cone, and *cube*). Ask, “What is the name of this shape?”

C. TRY MORE: Problem Solving Worksheet

Students **match** shapes and **names**, using a word bank.

Close

A. SHOW ME, SHOW OTHERS: I Learned...

Review what students have learned. Ask students to demonstrate skill, share their worksheets or read their Number Notes. It is essential that students have a meaningful way to communicate what they have learned.

B. NUMBER NOTES

Model writing vocabulary “*rectangular prism*,” “*triangular prism*,” and “*cube*” on Teacher Number Notes. Students **write** “*rectangular prism*,” “*triangular prism*,” and “*cube*” in Number Notes using numbers, math symbols, words, pic-symbols, or objects and describe what they have learned. Option: Place math pics on Number Notes page and circle or stamp the pic-symbols that represent what you have learned.

Follow Up

OBJECTIVE: Student will identify 3-dimensional shapes.



Real Life Problem Solving

CLASSROOM: Students **sort** shape examples from the classroom, e.g., straws, pencils, markers, paper towel tube (cylinders), balls (sphere), shoebox containers (*rectangular prism*), tissue boxes and dice (*cubes*), books (*rectangular prism*), and food models and blocks (multiple shapes). Students **label** the categories with pic-symbols or words.

CALENDAR: Talk about shapes associated with holidays and birthdays, e.g., cranberry sauce in a can, pumpkin (sphere), pumpkin pie slice (*triangular prism*), presents (*rectangular prism*, cube), piece of cake (*triangular* or *rectangular prism*), 4th of July fireworks (cylinder), New Year's noisemakers (cylinder), etc.

COMMON: Send a list of five common household items and 3-D pic-symbols (cylinder, *cube*, sphere, and *rectangular* and *triangular prisms*). Optional: Send blocks as examples. Students **locate** examples at home and **fasten** shape label next to items found or **write** shape name.



Workstations

MATERIALS / PREPARATION

Record each shape name on Step-by-Step three times in a row: "Find sphere." and "Find cylinder." Have blocks, two small balls, food models, classroom examples, Geometry cards, and Geometry pic-symbols available.

1
Level

Students **activate** Step-by-Step and **sweep** to **match** one of three choices (one cylinder, two spheres). Repeat for cylinder, altering choices. Option: Label three labeled containers with blocks and fasten off edge of lap tray. Students sort food models into containers to match shape.

2
Level

Students **sort** block shapes, and ball, and examples (one of each shape) and **match** each shape type with Geometry cards (cylinder, cone, *cube*, sphere, and *triangular* and *rectangular prisms*) and **name** each.

3
Level

Students **match** pic-symbols to pictures of each shape and example (cylinder, cone, *cube*, and *triangular* and *rectangular prisms*) and **name** each.



Games

A. VOCABULARY: Spinning for Cubes, Prisms

MATERIALS / PREPARATION

Place In the City game board on table. Place pic-symbols (*cubes*, *prisms*, blank) on All-Turn-It spinner. Give each student a pawn.

GAME DIRECTIONS

Player **spins** All-Turn-It spinner. If player spins "*cubes*, *prisms*" he/she **moves** the pawn to the next space. If player spins a blank, he/she loses a turn. Player to reach end of the board first wins.

B. SKILL: Four Square Shape Bingo

MATERIALS / PREPARATION

Divide group into teams. Give each player a paper divided into four squares. Players fill each space with a different 3-D shape. Fasten Geometry cards to the All-Turn-It spinner. Have food models and blocks available.

GAME DIRECTIONS

Players **spins** and **takes** the card if matches a shape on four-square. Player **replaces** the object with the card and names the shape. Play continues. First player to **fill** four-square with cards wins.