

Getting Ready

OBJECTIVE: Student will identify congruent shapes.



Materials

Warm Up

- Vocabulary card (*shapes*)
- attribute blocks
- All Turn It spinner
- plastic bag

Explore

- poster (Supermarket Math)
- 2-D shapes

Warm Up

A. VOCABULARY REVIEW: *shapes*

Show/give Concrete Connection: Place square and circle in bag.

Label “*shapes*.”

Show “*shapes*” Vocabulary card.

Say, “**Read** it..”

Students **locate** and **show** examples of *shapes* using past work, pictures from home or books from media center.

B. FUN & GAMES: Face It

PREPARATION

Fasten 2-D *shapes* to All-Turn-It spinner. Place attribute blocks on table.

DIRECTIONS

Player **spins** and **matches** face to a 3-D *shape*. Player keeps 3-D *shape*. After 10 turns, player with the most of any one kind of *shape* wins.

Explore

A. POSTER: Supermarket Math

Point out 2-D *shapes* or faces on poster.

Discuss 2-D and 3-D *shapes* and personal experiences; use information from home.

B. TOOLS & MANIPULATIVES

Say, “Let’s **explore** 2-D *shapes*.”

Model placing and moving square, turning and flipping it. After each move ask, “What *shape* is this?”

Students **hold** and **explore** 2-D *shapes*.

Materials

Introduce

- poster (Supermarket Math)
- Vocabulary card (*congruent*)
- 2 duplicate squares
- plastic bag
- attribute blocks

Teach

- attribute blocks
- pocket chart
- congruent 2D shapes
- ruler

Introduce and Connect

A. EXPLORE POSTER: Supermarket Math

Show/give student(s) Concrete Connections: Place two squares in bag. Label “*congruent*.”

Direct students to **point** to the *congruent* shapes, placing one on top of the other to compare number and length of sides. Compare number of sides on square with number of sides on cracker on poster. Place one square on top to see if they are the same size.

B. SHOW & TELL

Ask, “What do you know about *congruent* shapes? Students **tell** what they **see** on the poster and what they know. Write student comments on Number Notes poster (with numbers, math symbols, words, pic-symbols, and objects.) Option: Use past student work or items from home when possible. *Note: Objects or pictures can be fastened to the Number Notes poster.*

C. VOCABULARY: *congruent*

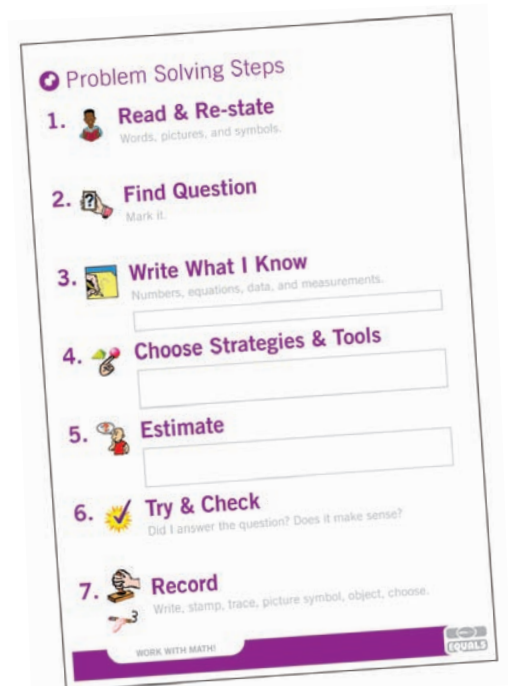
Show “*congruent*” Vocabulary card

Say, “This says *congruent*. **Read** it.”

Students **say**, “*congruent*” three times.

Congruent shapes have the same size and shape but may be placed differently.

P Problem Solving Steps



Problem Solving Steps

- 1. Read & Re-state**
Words, pictures, and symbols.
- 2. Find Question**
Mark it.
- 3. Write What I Know**
Numbers, equations, data, and measurements.
- 4. Choose Strategies & Tools**
- 5. Estimate**
- 6. Try & Check**
Did I answer the question? Does it make sense?
- 7. Record**
Write, stamp, trace, picture symbol, object, choose.

WORK WITH MATH! EQUALS

Sensing Math

Place two shapes in paper bag. Students **feel** and **guess** if the shapes are *congruent*. Pull them out of the bag to check.

Level Guide

1 Level = Severe

2 Level = Moderate

3 Level = Mild

Teach

A. VISIBLE THINKING

Use congruent 2-D shapes and pic-symbols to show what you are thinking.
Demonstrate each CSA level twice.

C

Show two *congruent* squares. Place one on top of the other. Say, “They are the same: *congruent*.” Show each square placed at different angles. Say, “They are *congruent*.” Place them together again. Repeat with triangle.

S

Show two *congruent* squares made of Ang-legs. Say, “The squares have the same number of sides.” Count the sides on each square. Say, “The sides are the same size. They are *congruent*.” Repeat for triangles.

A

Trace squares and label “Square A” and “Square B.” Say, “*Congruent* shapes have the same number of sides and the sides are the same length.” Write “Square A and Square B are *congruent*.” Repeat for triangles.

B. TRY IT: Skill Drill Worksheet

Students **identify** *congruent* shapes.

Problem Solving

A. DEMO: Problem Solving Steps poster

Megan wants *congruent* shapes to sew on a T-shirt design. Help her find *congruent* squares, triangles, and rectangles. Place attribute blocks and ruler on table.

B. SOLVE IT

Match the *congruent* shapes.

Place attribute block and ruler on table.

1
Level

Place one large triangle, one large triangle, and square in pocket chart. Show large triangle. Say, “Find a *congruent* triangle.” Students **choose**. Pull out shape to match in number and length of sides. Students **record**.

2
Level

Students **match** six shapes to show they are *congruent*. Students **record** on worksheet.

3
Level

Students **measure** sides and compare 10 shapes to confirm they are *congruent*. Students **record** on worksheet. Challenge: Place two *congruent* shapes, with one turned or flipped. Ask, “Are they *congruent*?”

C. TRY MORE: Problem Solving Worksheet

Students **mark** *congruent* shapes.

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 “congruent” on Teacher Number Notes. Students **write** “congruent” in Number Notes using numbers, math symbols, words, pic-symbols, or objects. 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 congruent shapes.



Real Life Problem Solving

CLASSROOM: Students **compare** snack cracker or cookie shapes to determine if they are *congruent*. Students sort shape templates (CD) and group according to congruency. Students fasten to bulletin board and label them.

CALENDAR: Students **look** for *congruent* shapes on the calendar and weather chart. Students look around the room to find other shapes that might also be congruent to shapes identified on calendar and weather chart. Measure to confirm congruency.

COMMON: Students **look** for shapes *congruent* to a specific attribute block. **Bring** example to compare. **Discuss** why it's *congruent*, or why it isn't. Send home shape templates (CD). Direct students to try to find shapes congruent to the templates at home. Students bring list of shapes and whether or not there are congruent to the template.



Workstations

MATERIALS / PREPARATION

Label three containers with two shape template squares and a circle. Record "Sort the congruent squares" on Step-by-Step.

- 1 **Level** Students **activate** Step-by-Step and **sort** squares to match congruent squares and sweep into container.
- 2 **Level** Students **match** up shapes to show they are *congruent*. Students **sort**.
- 3 **Level** Students use ruler to **measure** sides and compare shapes to confirm they are *congruent*. Students **sort**.



Games

A. VOCABULARY: Spinning for Congruent

MATERIALS / PREPARATION

Place Supermarket Math game board on table. Place vocabulary pic-symbols (congruent, blank) on All-Turn-It spinner. Give each student a pawn.

GAME DIRECTIONS

Player **spins** All-Turn-It spinner. Player **reads** word and **moves** pawn to next space. **Spinning** a blank means skip a turn.

B. SKILL: Congruent Shape Quest

MATERIALS / PREPARATION

Fasten 6 large and small circle, square and triangle shapes on All-Turn-It spinner. Place remaining attribute blocks on table.

GAME DIRECTIONS

Player **spins** and **finds** *congruent* shape on table and sets aside. Players can only **take** 1 of each shape. If player **spins** a shape already used, turn is skipped. After 10 turns, players compare pairs. If all players have an exact match of **congruent** shapes, the shapes are **removed**. Compare remaining pair amounts to determine winner.