



Grade 1 Unit 6

Understanding Shapes and Fractions

Volume 1 Issue 6

References

Helpful Links:

<https://smart.wikispaces.com/hcps.org/Grade+1+Geometry>

http://www.harcourtschool.com/activity/solid_figure_factory/

<http://www.shodor.org/interactivate/activities/ShapeSorter/>

Math Grade 1 Textbook Connection:
Ch. 9, lesson 1-10
Ch. 10 lesson 1, 2
Ch. 12 lesson 5

Textbook Online:

<http://connected.mcgraw-hill.com/connected/login.do>

Ask your teacher for the online passcode.

Dear Parents,

Your student's math class is calling for students to be actively engaged in doing math in order to learn math. In the classroom, students will frequently work on tasks and activities to discover and apply mathematical thinking. Students will be expected to explain or justify their answers and to write clearly and properly. Your students will receive a consumable textbook and online access from their teacher.

Concepts Students will Use and Understand

- study and compose two- and three-dimensional figures
- identify basic figures within two- and three-dimensional figures
- compare, contrast, and/or classify geometric shapes using position, shape, size, number of sides, and number of angles
- solve simple problems, including those involving spatial relationships
- investigate and predict the results of putting together and taking apart two- and three-dimensional shapes
- create mental images of geometric shapes using spatial memory and spatial visualization
- relate, identify, partition, and label fractions (halves, fourths) as equal parts of whole objects
- apply terms such as half of, quarter of, to describe equal shares
- work with categorical data by organizing, representing and interpreting data using charts and tables
- pose questions with 3 possible responses and then work with the data collected

Vocabulary

Face: the flat surface of a solid figure

Attributes: a characteristic such as shape or size

Two-Dimensional: the outline of a shape such as a triangle, square or rectangle

Composite: made up of several different things

Quarter: 4 equal parts

Rectangle: a shape with four square corners

Triangle: a shape with three sides and three corners

Cube: a solid with 6 faces all the same size

Cone: a solid with one curved surface, one flat surface that comes to a point

Whole: all, everything, total amount

Side: a line segment joining two corners of a figure

Angle: two rays that share an endpoint

Three-Dimensional: a solid figure

Half: 2 equal parts

Circle: a closed round figure

Square: a rectangle that has four equal sides

Rectangular Prism: a solid with two identical rectangular bases

Cylinder: a solid with one curved surface and two identical circle bases

Try <http://intermath.coe.uga.edu/dictionary/homepg.asp> or

<http://www.amathsdictionaryforkids.com/> for further examples.

Symbols

■ square

● circle

□ square

▼ triangle

▲ triangle

▭ rectangle

⬡ hexagon

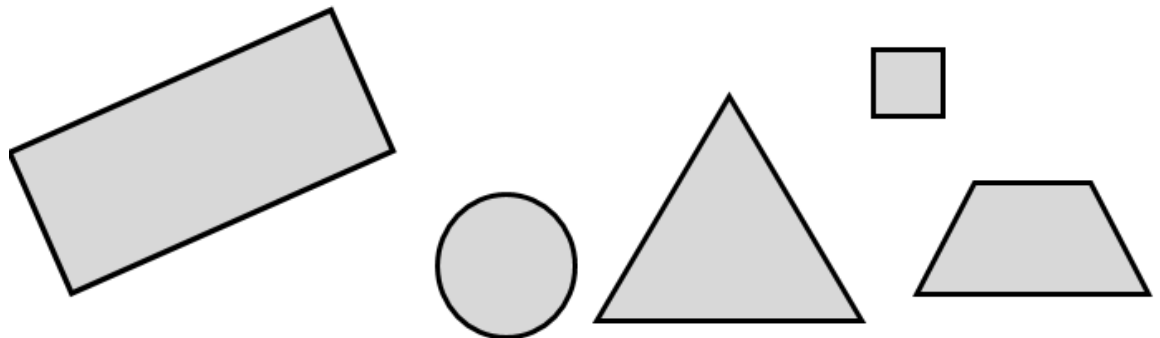
🔲 cylinder

🔲 rectangular prism

Example 1

How are the items alike?

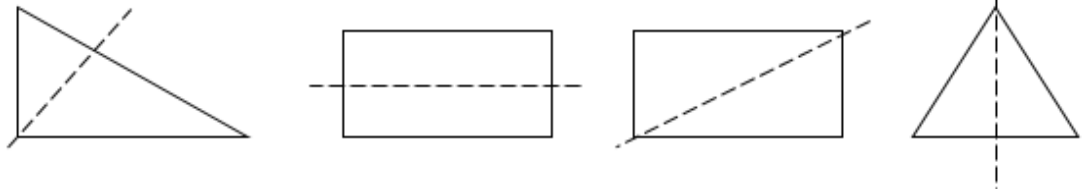
How are these items different?



Example 2: What shapes can you make using a geo-board



Example 3 Partition the shapes into halves



Example 4

Which One Doesn't Belong?

The image shows four shapes labeled A, B, C, and D. Shape A is an inverted triangle with diagonal hatching. Shape B is a solid black upright triangle. Shape C is a circle with diagonal hatching. Shape D is a right-angled triangle with diagonal hatching. Below the shapes are three horizontal lines for writing an answer.

A B C D

Shape _____ doesn't belong because _____

Activities At Home:

- Go on a shape hunt outside, ask your student to name the shapes of doors, windows, bicycle wheels, etc.
- Ask your student to identify the shapes of various road signs while traveling in the car.
- Talk with your student about the various shapes of items packaged in the grocery store.
- Build with blocks. Discuss what shapes were used to create the structure.