Congruent Figures—Congruent figures have corresponding angles that are equal and corresponding sides the same length.

Corresponding—Corresponding sides or angles have the same relative position in similar figures.

Ratio - A ratio is a comparison of two quantities that tells the scale between them.

Scale Factor - The scale factor shows the ratio of the lengths of similar figures. If the scale factor is 3, all the length measures in the image are three times the corresponding measures in the original.

Similar—Similar figures have the same shape. Two figures are mathematically similar if and only if their corresponding angles are equal and the ratios of all pairs of corresponding sides are equal.

Web Resources

Math Dictionaries
http://www.amathsdictionaryforkids.com/
http://www.harcourtschool.com/glossary/math2/index_temp.html
http://www.intermath-uga.gatech.edu/dictnary/homepg.asp

Learning Activities Related To CMP
http://illuminations.nctm.org
http://matti.usu.edu/nlvm/nav/vlibrary.html

Other Sources
Portland Public Schools-Family Math Resources
http://inside.pps.k12.or.us/.docs/pg/857

Roseburg Resources
http://www.roseburg.k12.or.us/educate/math/math

Hot Math
http://www.hotmath.com/students_and_parents

Education World—web site reviews
http://www.education-world.com/awards/past/topics/math.html

Pearson-Helping with Homework

Connected Mathematics Project
Roseburg Public Schools
Grade 7

Stretching and Shrinking
Geometry Similarity

Unit Goals:
- Enlarge and shrink plane figures.
- Identify the corresponding parts of similar figures.
- Describe and produce transformation of plane figures.
- Analyze scale factors between figures.
- Apply properties of similar figures.
Tips for Helping at Home
Good questions and good listening will help children make sense of mathematics and build self-confidence. A good question opens up a problem and supports different ways of thinking about it. Here are some questions you might try, notice that none of them can be answered with a simple “yes” or “no”.

Getting Started
- What do you need to find out?
- What do you need to know?
- What terms do you understand or not understand?

While Working
- How can you organize the information?
- Do you see any patterns or relationships that will help solve this?
- What would happen if …?

Reflecting about the Solution
- How do you know your answer is reasonable?
- Has the question been answered?
- Can you explain it another way?

At Home:
1. Talk with your child about what’s going on in mathematics class.
2. Look for ways to link mathematical learning to daily activities. Encourage your child to figure out the amounts for halving a recipe, estimating gas mileage, or figuring a restaurant tip.
3. Encourage your child to schedule a regular time for homework and provide a comfortable place for their study, free from distractions.
4. Monitor your child’s homework on a regular basis by looking at one problem or asking your child to briefly describe the focus of the homework. When your child asks for help, work with them instead of doing the problem for them.

At School
1. Attend Open House, Parent Conferences, and school events.
2. Join school booster organization.
3. Contact student’s math teacher.

For More Help Contact:
Math Specialist - Ph: 541.440.4039