

Third Grade
Trailblazers Unit 5

“Area of Different Shapes”

North Carolina Standard Course of Study

<http://www.ncpublicschools.org/curriculum/mathematics/scos/2003/k-8/21grade3>

MTB Correlation to NCSCOS

<http://www.kendallhunt.com/uploads/2/CORR-NC-MTB2.pdf>

Unit Activities

- Students find the area of an irregular shape by helping Professor Peabody find the number of tiles he will need to cover a floor. They find the area of other polygons and curved shapes as well.
- Students investigate the relationship between shape and area and estimate the area of irregular shapes. They also learn to find the median value of data.
- Students read a story in the Adventure Book about measuring the area and length of footprints.
- Students work in pairs or groups to determine the amount of material it would take to make a raincoat for Joe the Goldfish. They design the coat and determine its area in square centimeters. Students are introduced to the Student Rubric: *Solving*
- Students solve word problems given a list of books and prices.

Unit Vocabulary

Area	Estimate	Square centimeter	Average	Mean
Median	Variable		Flats	Packs
regrouping	Bubble sort	Decreasing order	Increasing order	A.M.
P.M.	Analog clock	Digital clock		

Third grade glossary link: <http://www.kendallhunt.com/index.cfm?PID=234&PGI=0>

Unit Manipulatives/Supplies

Scissors	Envelopes for storing flash cards 1/student	Eyedropper/student group	Paper towels – 4 rolls - 4 different brands	Small containers for water
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1 geoboard for drying paper towels/student group				
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Unit Assessment Indicators

- Can students find the area of shapes with straight or curved sides by counting square units?
- Can students recognize that different shapes can have the same area?
- Can students find the median of a data set?
- Can students identify and use variables?
- Can students make and interpret bar graphs?
- Can students collect, organize, graph, and analyze data?
- Can students use data to make predictions and solve problems?
- Can students solve open-response problems and communicate solution strategies?

Unit Literature

None Suggested

Unit Software

- *The Factory Deluxe* promotes spatial reasoning and practices finding area.
- *Graphers* is a data graphing tool appropriate for young students.
- *Kid Pix* allows students to create their own illustrations.

Websites to Explore

- Rainforest Math – Click on level C or D and choose “Area” on row three (Measurement) of the menu.
<http://www.rainforestmaths.com/>
- Revise Wise Maths – Review of collecting and organizing data.
http://www.bbc.co.uk/schools/revisewise/maths/data/11_act.shtml

You Can Help Your Child

- Have different members of your family trace their handprints on a piece of paper and ask your child to compare the area of each by covering them with pennies or beans. Compare the area of your handprints with the area of your footprints. Which has more area?
- Help your child look for different shapes around the house, such as a plate or leaf. Trace the shapes on paper. Ask your child to compare the area of the different shapes by covering them with pennies or beans.
- Draw abstract shapes and find the area of the figure using square centimeter (spilled water on the counter, a piece of bread, etc).
- Use an old coloring book to find the area of different shapes, characters and objects.
- Measure and find the area of different rooms in your house.
- Help your child study the subtraction facts in Groups 7 and 8 using flash cards.