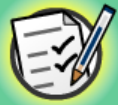# Real-World Math

Common core icons

This icon indicates a slide where the Standards for Mathematical Practice are being developed. Details of these are given in the Notes field.

MODELING

Slides containing examples of mathematical modeling are marked with this stamp.

This icon indicates an opportunity for discussion or group work.

The **Standards for Mathematical Practice** outlined in the Common Core State Standards for Mathematics describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

These are:

1) **Make sense of problems and persevere in solving them.**

2) **Reason abstractly and quantitatively.**

3) **Construct viable arguments and critique the reasoning of others.**

4) **Model with mathematics.**

5) **Use appropriate tools strategically.**

6) **Attend to precision.**

7) **Look for and make use of structure.**

8) **Look for and express regularity in repeated reasoning.**

This icon indicates that the slide contains activities created in Flash. These activities are not editable.

This icon indicates teacher's notes in the Notes field.

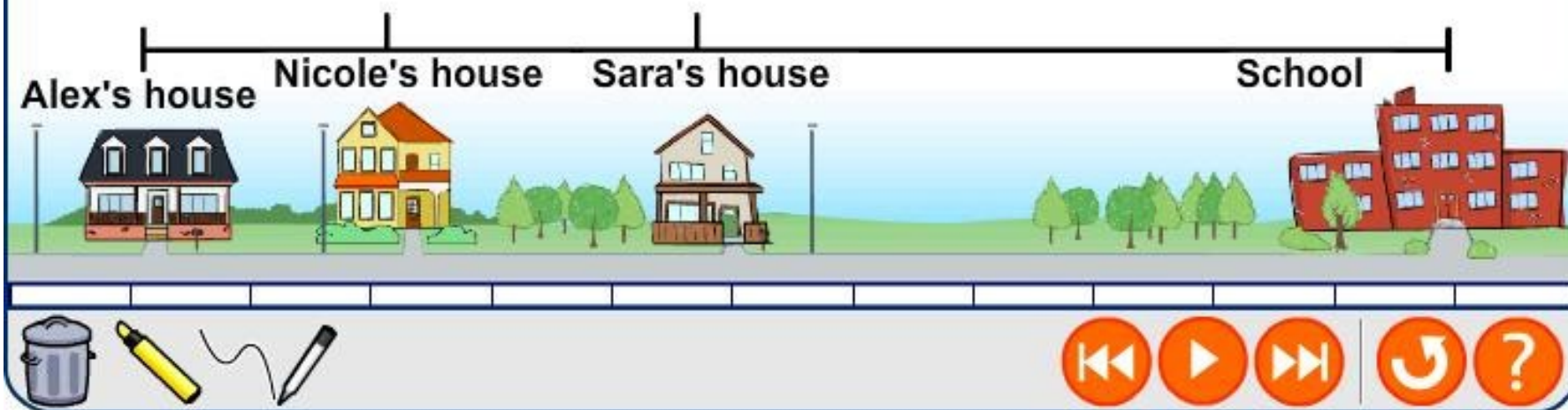It's 7:00, and I'm still sleepy! I wonder if I can stay in bed for ten more minutes and still get to school by 8:00.

Alex walks 2 miles to school each morning. First, he stops at Nicole's house. She lives 0.3 miles away. Then they walk 0.65 miles to Sara's house. How far is Sara's house from school?

Alex's house   Nicole's house   Sara's house   School

MODELING

The students at Alex and Nicole's school have planted a garden to grow fresh vegetables. Click on each button to help them with some of the math they will need to do!

Part 1

Part 2

Part 3

Part 4

MODELING

board works

Alex, Nicole and Alexis stopped for pizza after school. Alex had pepperoni pizza, garlic bread and soda, Nicole had cheese pizza and a sa... ...soda.

Alex, Nicole and Alexis went to a restaurant for some pizza after school. Can you help them find out how much change each person needs?

Click the menu to view the prices.

Press **start** to begin.

start

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Alex's parents have agreed to let him paint his room any color he likes if he buys the paint. If one pint of paint covers 50 ft², and each wall of Alex's room measures $8\frac{1}{2}$ ft by 10 ft, how many gallon cans should he buy?

How many ft² does Alex need to paint?

The area of each wall is:

$8\frac{1}{2}$ ft × 10 ft = **85 ft²**

There are 4 walls, so he needs to cover:

85 ft² × 4 = **340 ft²**

MODELING

board works

Alex's parents have agreed to let him paint his room any color he likes if he buys the paint. If one pint of paint covers 50 ft^2, and each wall of Alex's room measures $8\frac{1}{2}$ ft by 10 ft, how many gallon cans should he buy?

How many pints of paint will he need to cover 340 ft^2?

Each pint covers 50 ft^2, so we can divide to find out:

$340 \div 50 = 6\frac{4}{5}$ **pints**

How many pints are in a gallon? **8 pints = 1 gallon**

How many gallons does Alex need?

Alex needs less than 8 pints, so a one gallon can will be enough.

MODELING

Nicole wants to take cookies to school for a class party. There are 28 students in her class. Can you help her adapt this recipe to be sure she brings enough cookies for everyone?

Sugar Cookies

Makes 15

$\frac{2}{3}$ c butter   2 c flour

$\frac{3}{4}$ c sugar $\frac{1}{4}$ tsp salt

$\frac{1}{2}$ tsp vanilla

1 egg

$1\frac{1}{2}$ tsp baking powder

Mix butter, sugar, vanilla and egg. Add dry ingredients. Bake 8 min at 350° F.