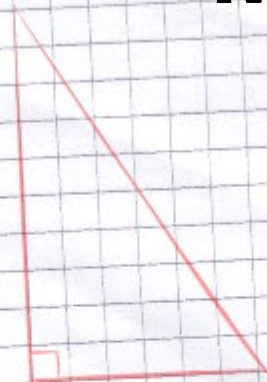
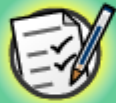


$$5 \times 7 = 35$$
$$20 + 2 = 22$$

Making Graphs 1



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.



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.



I wonder what the class's favorite ice cream flavor is?

How could Alex find an answer to his question?



Think of some questions you could answer by gathering information from the class.



How tall are the students in our class?

How many students in our class buy school lunch?

What is the favorite color of most students in our class?

Let's start by investigating Nicole's height question.



Height investigation



Measure and record each student's height.



Line plot

MODELING



boardworks

How could we organize the information about the students' heights?



Make your own line plot

MODELING



board
works

Add your own labels and numbers to
this line plot using the pen tool.
Drag the crosses into place to
represent your data.

Press **start** to begin.

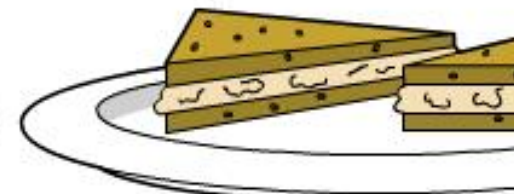
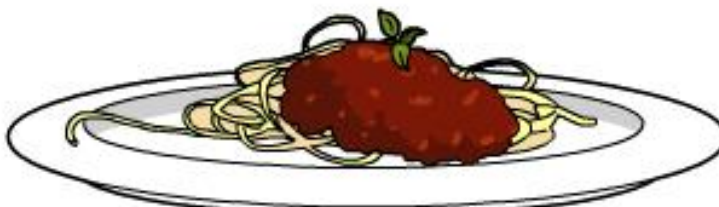
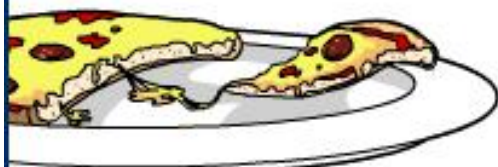
start





Nicole asked the students in her class how many times they ate school lunch last week. She recorded their answers:

How many times did you eat school lunch last week?



Make your own picture graph


MODELING



Number of students



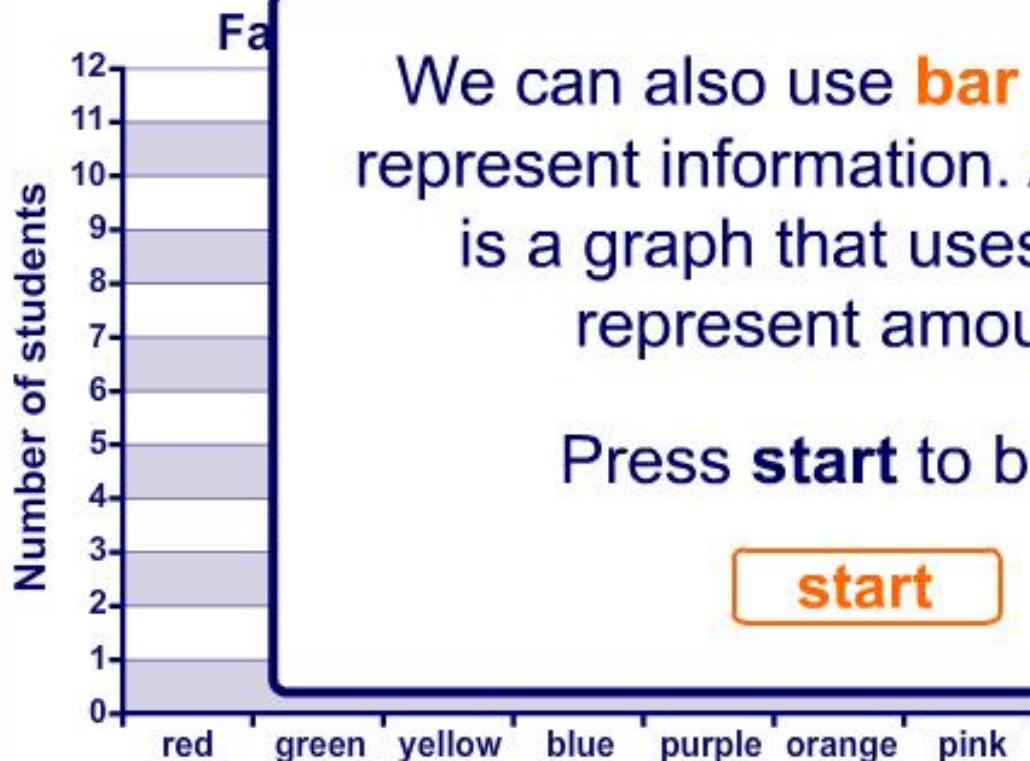
Drag the plate symbols to create a picture graph showing how often students in your class eat school lunch.

 = 1 student





Bar graphs



We can also use **bar graphs** to represent information. A bar graph is a graph that uses bars to represent amounts.

Press **start** to begin.

start

ed the
er class
te colors.

see how
sent their
n a bar



Make your own bar graph

MODELING



boardworks

Add your own labels to this bar graph using the pen tool. Drag each bar to the correct height.

