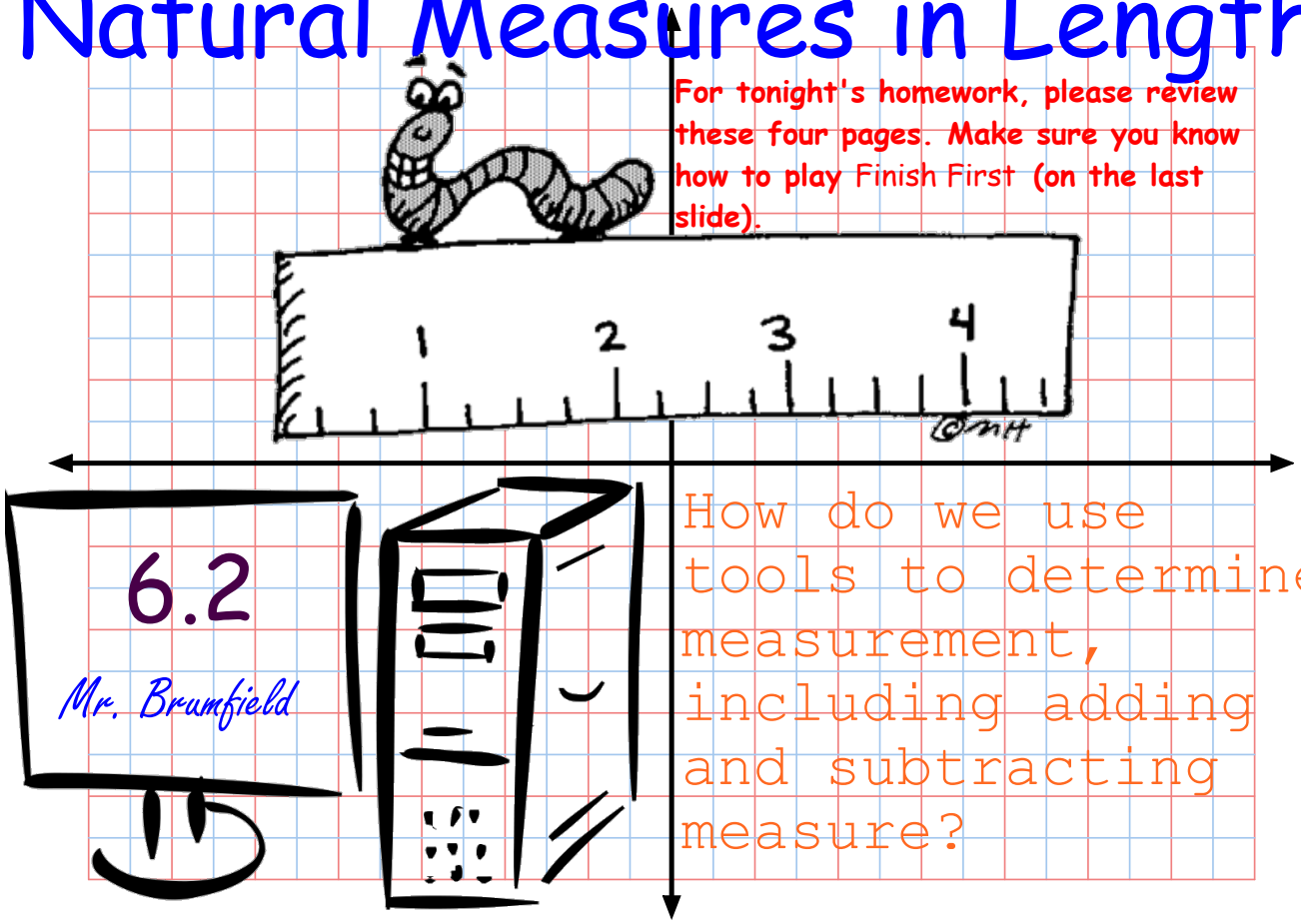
Natural Measures in Length

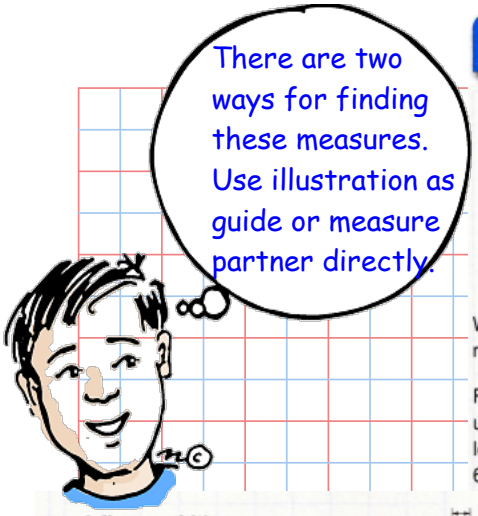
For tonight's homework, please review these four pages. Make sure you know how to play Finish First (on the last slide).



6.2

Mr. Brumfield

How do we use tools to determine measurement, including adding and subtracting measure?



LESSON 6·2

Personal Measures

Reference
10 millimeters (mm) = 1 centimeter (cm)
100 centimeters = 1 meter (m)
1,000 millimeters = 1 meter
1 inch (in.) is equal to about $2\frac{1}{2}$ (2.5) centimeters.

Work with a partner. You will need a ruler and a tape measure. Both tools should have metric units (millimeters and centimeters) and U.S. customary units (inches).

Find your own personal measures for each body unit shown. First measure and record using metric units. Then measure and record using U.S. customary units. Measure the lengths in Problems 1–4 to the nearest millimeter and $\frac{1}{16}$ in. and Problems 6–8 to the nearest centimeter and $\frac{1}{4}$ in.

1. **1-finger width**

_____ mm
_____ cm
_____ in.

2. **Palm**

_____ mm
_____ cm
_____ in.

3. **Joint**

_____ mm
_____ cm
_____ in.

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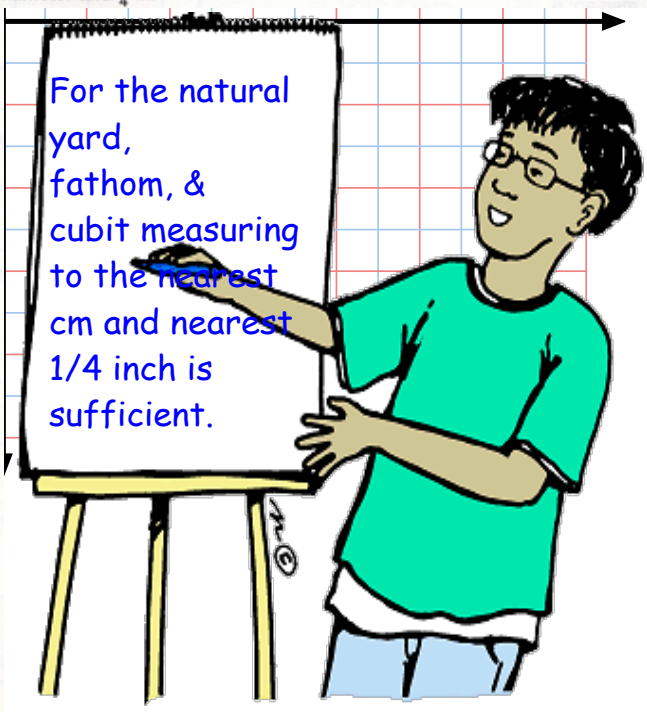


LESSON 6·2

Personal Measures *continued*

4. **Finger stretch**

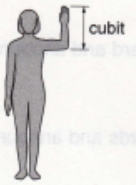
_____ mm
_____ cm
_____ in.

5. **Great span**

_____ mm
_____ cm
_____ in.

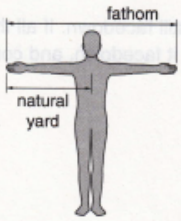
6. **Cubit**

_____ mm
_____ cm
_____ in.



7. **Fathom**

_____ mm
_____ cm
_____ in.



8. **Natural yard**

_____ mm
_____ cm
_____ in.

Question

Question

Question

Question

Question

Finish First

LESSON 6•2

Finish First

Materials ☐ A deck of cards, consisting of four of each of the numbers 4, 5, 6, 7, and 8 (Do not use any other cards.)

Number of Players 2

Object of the Game To be the first to reach 21 or more

Directions

Decide who will go first. That person should always play first whenever you start a new game.

1. Shuffle the cards. Place the deck facedown.
2. The player going first turns over the top card and announces its value.
3. The player going second turns over the next card and announces the total value of the two cards turned over.
4. Partners continue to take turns turning over cards and announcing the total value of all the cards turned over so far.
5. The winner is the first player to correctly announce "21" or any number greater than 21.
6. Start a new game using the cards that are still facedown. If all the cards are turned over during a game, shuffle the deck, place it facedown, and continue.

A **fair game** is one in which each player has the same chance of winning. If there is an advantage or disadvantage in playing first, then the game is not fair.

With your partner, investigate whether *Finish First* is a fair game.

1. Collect data by playing the game. Over the next week, play *Finish First* at least 50 times. Keep a tally each day. Show how many times the player going first wins, and how many times the player going second wins.

Date	Player Going First Wins	Player Going Second Wins	Total Games to Date

2. Each day you play the game, record the results on the classroom tally sheet.
3. Each day you play, ask yourself:
   - What is my estimate for the chance that the player going first will win?
   - What is my estimate for the chance that the player going second will win?
   - Do my estimates change as more and more games are played?
   - Does *Finish First* seem to be a fair game?

Attachments

 Order Fractions and Decimals