

# Bingo!

6688

## Introduction

This activity provides students with an opportunity to use a familiar game to determine the most appropriate units for a given situation.

## Grades 6-8

### NCTM Measurement Standards

- Understand measurable attributes of objects and the units, systems, and processes of measurement
- Understand, select, and use units of appropriate size and type to measure angles, perimeter, area, surface area, and volume

### Files/Materials Needed

*Bingo.act, Bingo.73i*

## PART 1 SELECT UNITS BINGO

1

- Launch TI-Navigator™ on the computer and start the session.
- Have each student log into NavNet on their calculator. Then log in to NavNet on a calculator as a teacher as well.
- Load the *Bingo.act* activity settings file into Activity Center. The diagram displayed in Activity Center will match the sketch shown here.

B	I	N	G	O
CM <sup>2</sup>	M <sup>3</sup>	KM <sup>2</sup>	YD <sup>2</sup>	MI <sup>2</sup>
MM <sup>3</sup>	MI <sup>3</sup>	FT	CM	KM <sup>3</sup>
IN <sup>3</sup>	YD <sup>3</sup>	FR	M <sup>2</sup>	IN
CM <sup>3</sup>	FT <sup>2</sup>	LB	KM	YD
OZ	MI	IN <sup>2</sup>	M	FT <sup>3</sup>

- Start the activity and instruct students to press **1:Activity Center**. Students will see the image shown above on their calculator screen.

2

You will ask 10 questions of students in which Bingo is obtained on the tenth question. Students are expected to mark their answer to each question by referencing the diagram on their calculator. You should mark the answer as well, which will serve as the answer key (teacher marks appear in green) at the conclusion of the activity.

3

Ask questions that will require students to select a most appropriate unit of measure. For example, you may ask:

- *What is the best unit of measure to use when measuring the amount of medicine in a capsule? (mm<sup>3</sup>)*
- *What is a customary measurement unit that can be used to determine the distance between New York City and Los Angeles? (mi)*

The units given are abbreviations with the following meanings (Note: some are given as square units or cube units):

IN → inch	FT → foot	YD → yard
MI → mile	CM → centimeter	M → meter
KM → kilometer	LB → pound	OZ → ounce

# Bingo!

4

After the tenth question, have students select **SEND** to mark their points in the Activity Center window. The answer should be evident in Activity Center because of the green teacher marks as well as a large cluster of answers from the student responses. You can also click the 'List-Graph' tab, sort by student names, and scroll through the points to see who won.

This activity can be repeated several times, using different questions each time.

## **PART 2** CALCULATE MEASUREMENTS 1

- Force send the *Bingo.73i* screen image to students.
  - Instruct students to exit NavNet.
  - Have students press  $\boxed{2nd}$   $\boxed{[FORMAT]}$  and select **AxesOff**.
  - Next, have students press **DRAW**  $\boxed{\blacktriangleright}$   $\boxed{\blacktriangleright}$  **2:RecallPic**  $\boxed{2}$  to open the image shown here on their screen.
- With the sketch open on their calculator screen, tell students to press **DRAW** **7:Text** and go to each open cell and type any even number between 10 and 60. They should only use a number once. (Note: Students should stay in draw mode during this entire activity.)
  - Ask students a series of questions whose answers are any even number between 10 and 60. Make sure you keep track of the correct answers. For example, you may ask:
    - What is the volume of a rectangular prism with dimensions 3 x 7 x 2? (42)*
  - If a student has this number on their Bingo card, they should mark the cell by inserting a decimal point in the cell (the student is still in **DRAW** mode).
  - Continue asking questions until a student calls BINGO! Use **Screen Capture** to see if the student correctly earned BINGO. Click **Zoom In** for a better look at individual student screens.
  - You can continue the game until there is a second and third place winner.

E	I	N	G	O
		FR		