

3rd Grade

VOLUME & MASS SPORTS ESCAPE ROOM



PRINTABLE • GOOGLE • WEBSCAPE™

Print & Digital Options

Printable Directions

Materials:

- Printed cards for each team
- Computer or Tablet for Videos (optional)

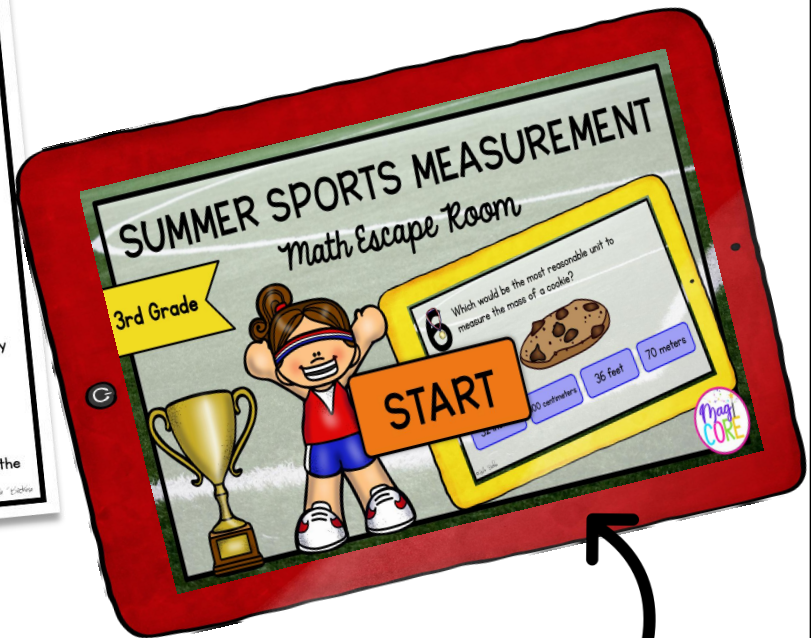
Duration: Approximately 90 minutes. You can also split this up into four 20- to 30-minute activities over four days, having students complete one challenge per day.

Prep

Print challenge cards and recording sheet for each team. Place challenge cards into envelopes.

Directions

1. Split your class into teams of 4-5 students. Ensure teams are multi-level.
2. (Optional) Show the introduction video.
3. Give each team their envelope for challenge #1.
4. Allow time for each team to work through each challenge. Once they solve the challenge, they should turn the code in to the teacher to check before the teacher assigns the consecutive challenge. (Optional) Teacher may show completion videos after each challenge is solved.
5. The first team to complete all four challenges solves the case and team members receive the certificates.
6. Assign "oops" cards to help create equity. Give an "oops" card to students who are taking the lead, to encourage them to step back and give other students a turn.

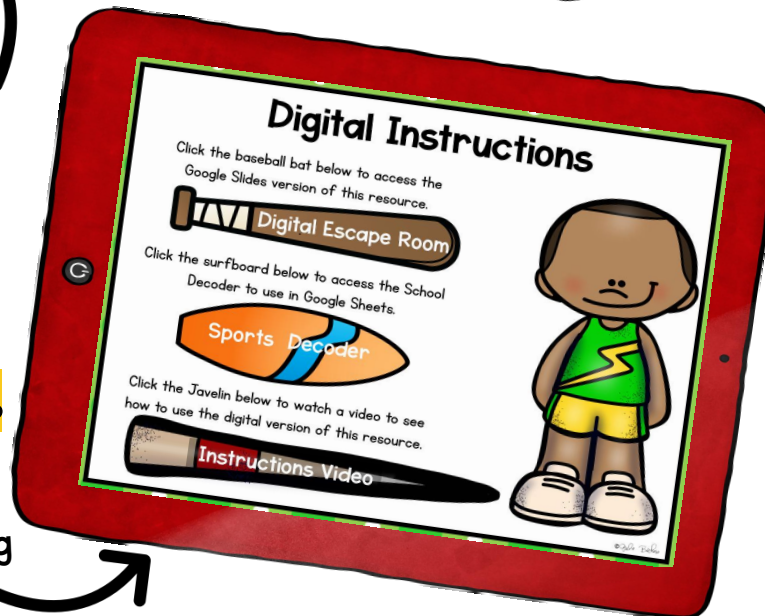


Print

- Low prep
- Student collaboration
- Can eliminate technology

Google Slides

- Decoder included for self correcting
- Videos



Webscape

- Self correcting
- Easy to follow
- Animation
- Videos
- Audio

Print Friendly Version

Challenge #1

1. Solve each "estimate volume" problem.
2. Record answers on your brochure.
3. Check your answers in the Sports Decoder.
4. Add the skateboarding medal to the locker room.
5. Scan the QR code in the corner of this page.
6. Move on to the challenge #2.



Scan the QR
code or click
[here](#) to view the
video.



1. Which would be the most reasonable unit to measure the volume of a pond?



- a. Inches
- b. Milliliters
- c. Centimeters
- d. Liters

2. Which could be the volume of a glass of milk?



- a. 5 milliliters
- b. 500 milliliters
- c. 50 liters
- d. 500 liters

3. Which would be the most reasonable unit to measure the volume of water inside a drinking straw?

- a. Miles
- b. Liters
- c. Grams
- d. Inches

4. Which could be the volume of a bathtub?

- a. 8 liters
- b. 800 milliliters
- c. 150 milliliters
- d. 150 liters

Challenge #3

1. Solve each volume word problem.
2. Record answers on your brochure.
3. Check your answers in the Sports Decoder.
4. Add the track medal to the locker room.
5. Scan the QR code in the corner of the next page.
6. Move on to the challenge #4.



1. Mika puts 4 packets of ketchup on her chicken nuggets. The volume of each packet of ketchup is shown below. How many milliliters of ketchup does she put on her chicken nuggets all together?

Show Your Work

- a. 8 mL ketchup
- b. 32 mL ketchup
- c. 24 mL ketchup
- d. 28 mL ketchup



2. Javier made a smoothie, shown below. If he gave 240 mL of the smoothie to his brother, how much smoothie is left for Javier to drink?



Show Your Work

- a. 240 mL smoothie
- b. 320 mL smoothie
- c. 260 mL smoothie
- d. 28 mL smoothie

3. Katia has a rain gauge to measure the rainfall in her garden. Yesterday, the rain gauge had 247 mL of water in it. After it rained this morning, the rain gauge had 307 mL of water. How many mL of rain water fell this morning?

Show Your Work

- a. 60 mL rainwater
- b. 554 mL rainwater
- c. 307 mL rainwater
- d. 50 mL rainwater

Interactive



Videos Tell the Story



Sports Measurement Skills and Challenges

Sports Escape Room

1. **Challenge #1:** Estimate volume to win the skateboarding medal.
2. **Challenge #2:** Estimate mass to win the swimming medal.
3. **Challenge #3:** Solve volume word problems to win the track medal.
4. **Challenge #4:** Solve the mass word problems to win the basketball medal.



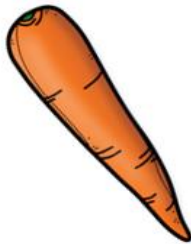
Challenges Assess Various Skills

1



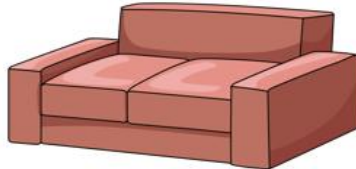
Estimate Mass

1. Which could be the mass of a carrot?



- a. 7 grams
- b. 125 kilograms
- c. 65 grams
- d. 93 kilograms

2. Which would be the most reasonable unit to measure the mass of a couch?



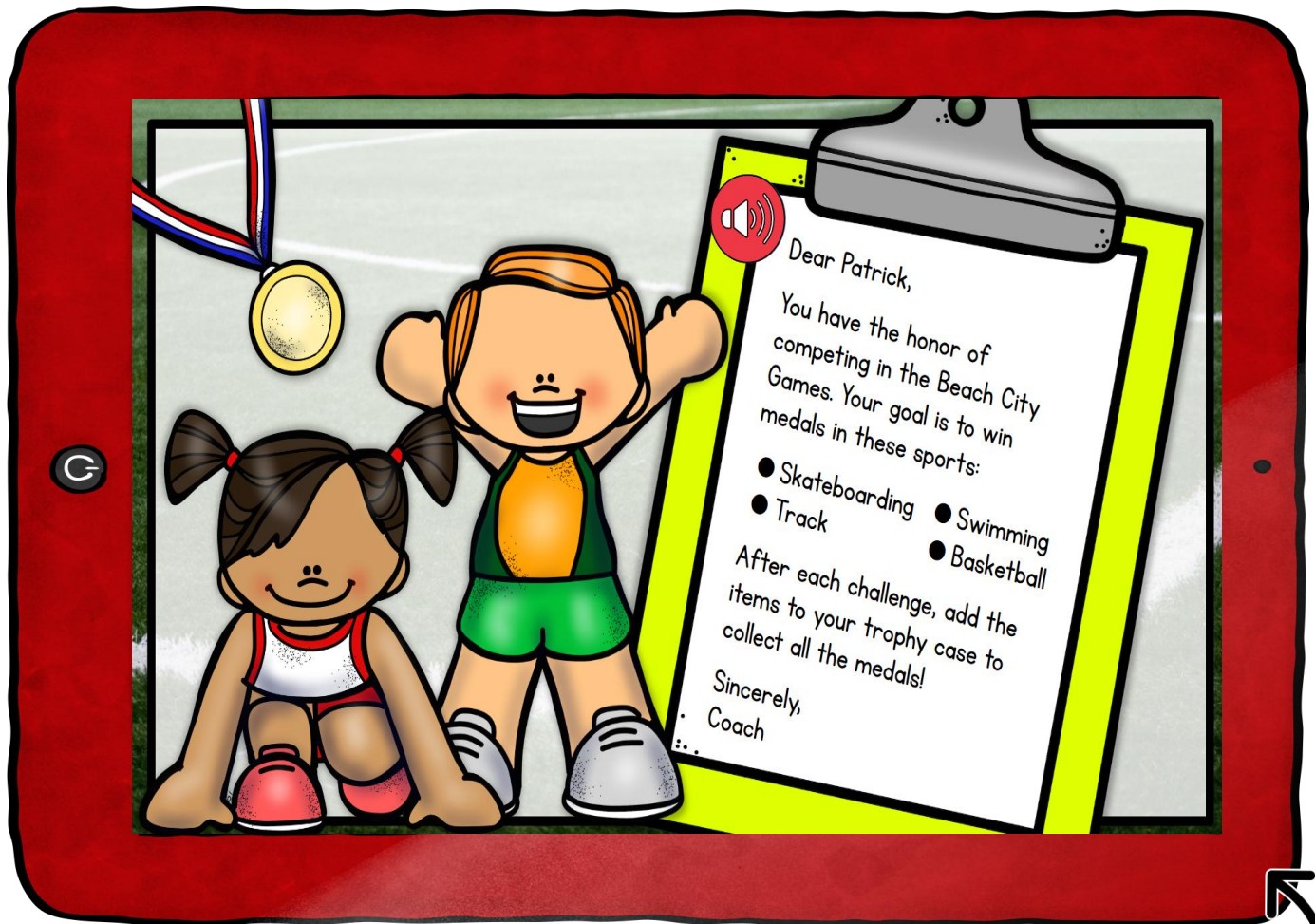
- a. Liters
- b. Kilograms
- c. Inches
- d. Grams

3. Which would be the most reasonable unit to measure the mass of a teddy bear?



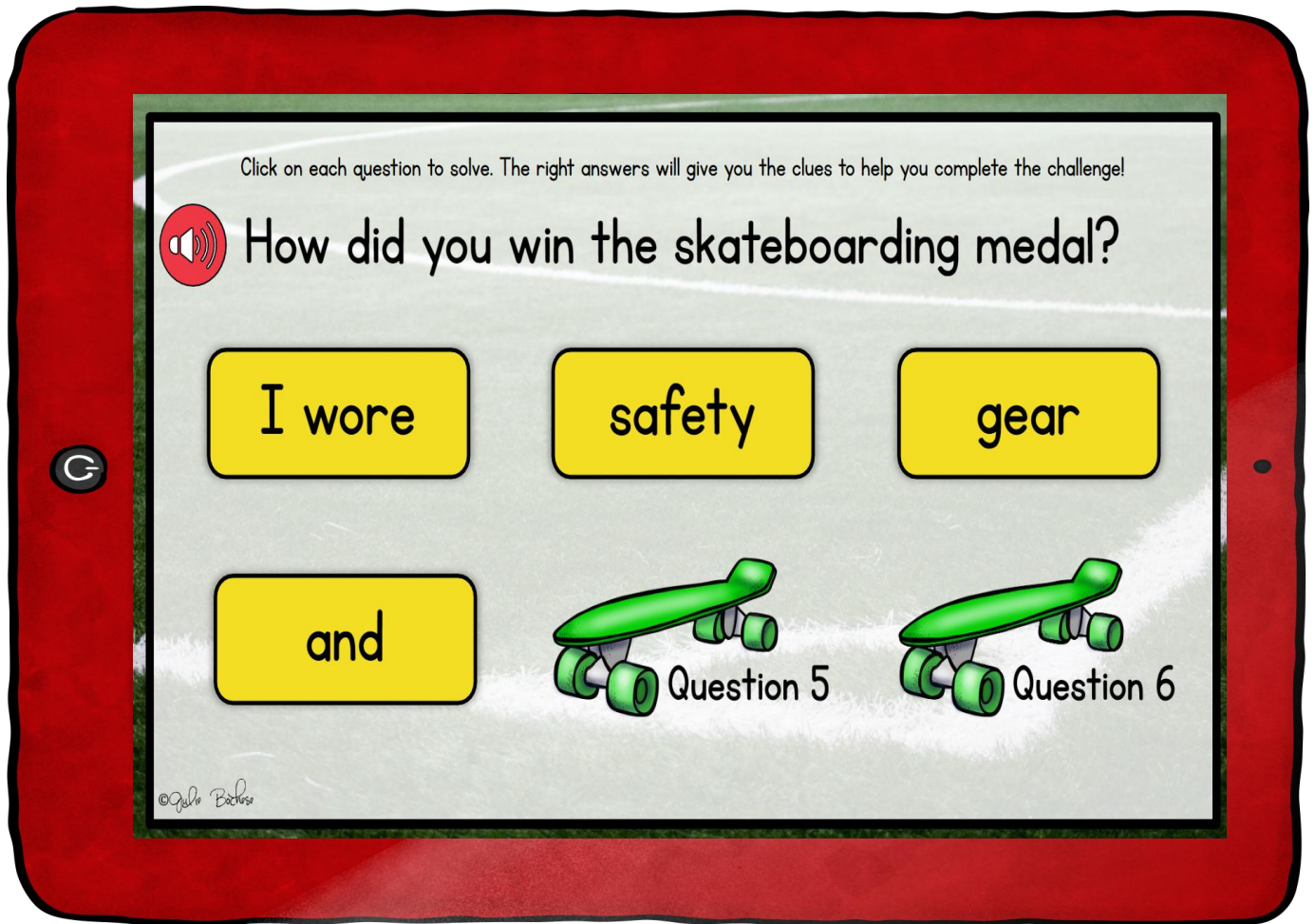
- a. Grams
- b. Liters
- c. Milliliters
- d. Inches

Webscape™



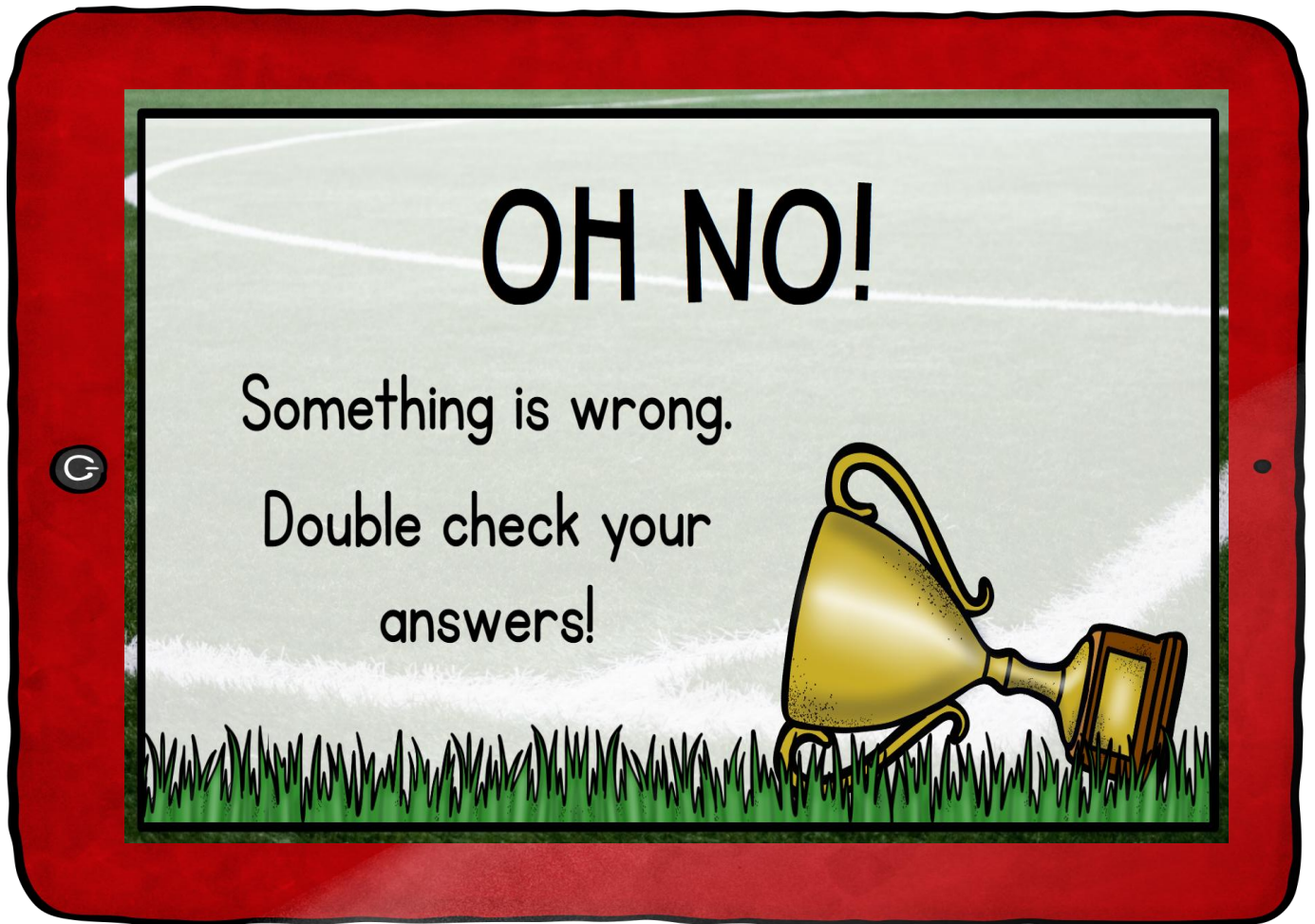
Most immersive and easy-to-follow experience.
Students follow directions with the click of a button.

Webscape™



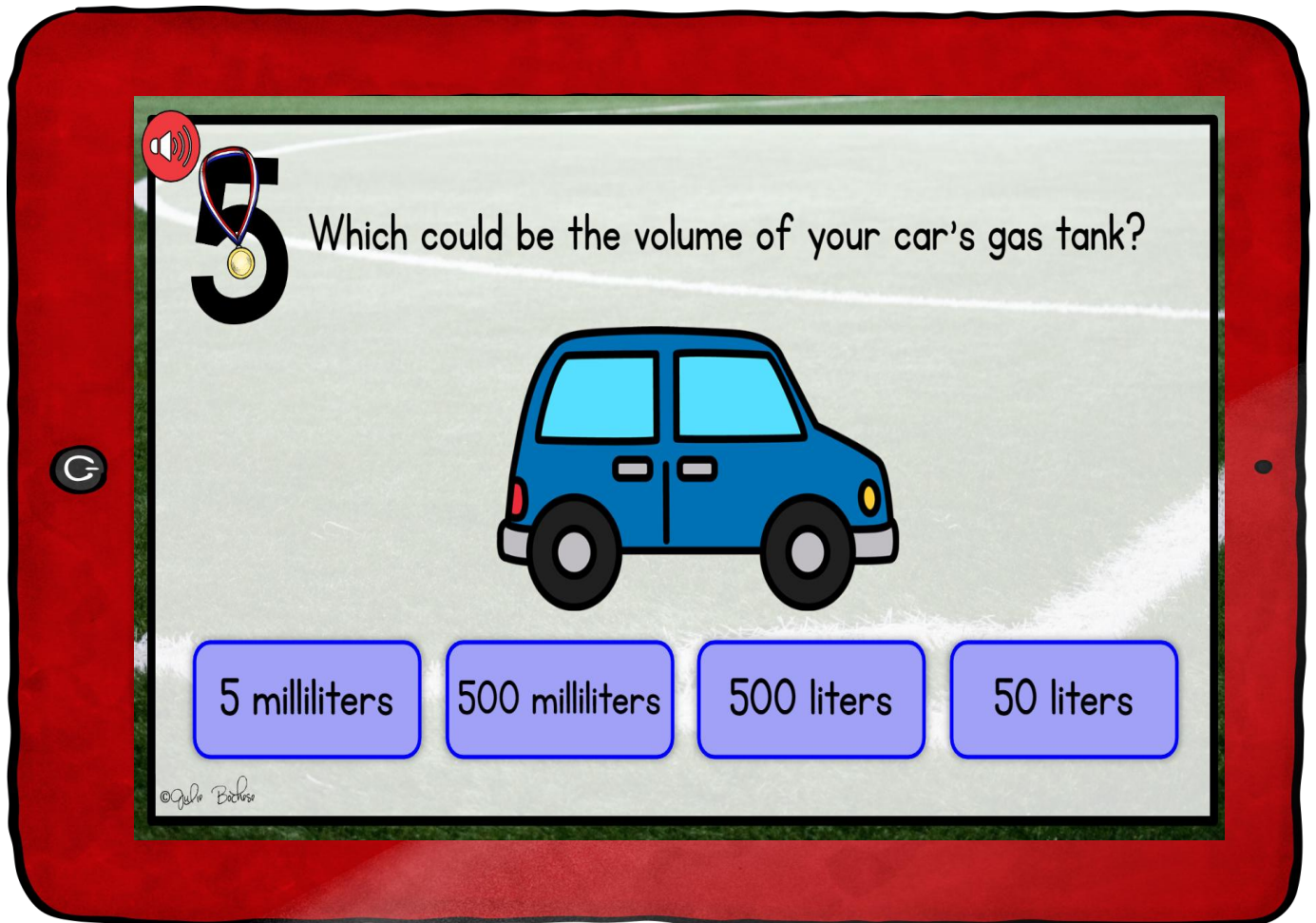
Includes option for audio on directions and questions.

Webscape™



Self-correcting but maintains rigor by ensuring students are not guessing.

Webscape™



Questions review key 3rd grade
math skills.

Printable Version

Includes "Ooops!"

Challenges

Ooops!

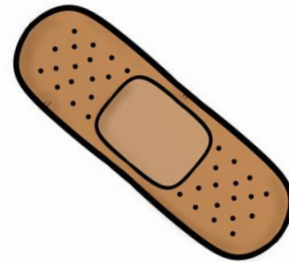
You lost your goggles. Your teammates must blindfold you for 5 minutes.



NO USING YOUR EYES FOR 5
MINUTES!

Ooops!

You scraped your knee and need a band aid.



NO HELPING YOUR TEAM FOR 3
MINUTES!

Printable Version

Includes Recording

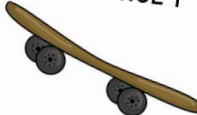
Brochure & Decoder

Sports Decoder

Use the following codes for each challenge to solve the clues and move to the next challenge.

	question 1	question 2	question 3	question 4	question 5	question 6
Challenge 1	a = I b = Wearing c = By d = I wore	a = wore b = safety c = going d = knee	a = gear b = goggles c = fast d = pads	a = and went b = to c = and d = when I	a = high on b = protect c = jumping d = practiced	a = my jumps b = my eyes c = high d = a lot.
Challenge 2	a = I wore b = I used c = I locked d = I went	a = a cap b = my legs c = off the d = to the	a = and b = and c = wall d = bottom	a = goggles b = paddled c = and tried d = of the	a = to keep the b = my arms c = to swim d = pool and	a = water out. b = to float. c = fast. d = held my breath.
Challenge 3	a = I pulled b = I looked c = I tripped d = I held	a = my friends b = behind c = over my d = out	a = shoulder b = me c = shoelaces d = my arm	a = to push b = to c = and didn't d = to quickly	a = myself b = see how c = grab d = pass	a = forward. b = fast I was. c = very fast. d = the bottom.
Challenge 4	a = I b = I passed c = I dribbled d = I tried	a = dribbled b = to my c = the ball d = to go	a = and b = friend c = and then d = around	a = ran with b = who shot c = went d = an opponent	a = the ball b = it in the c = to the d = to make	a = without passing. b = hoop. c = wrong side. d = a basket.

CHALLENGE 1




	Answer	Code
1.		
2.		
3.		
4.		
5.		
6.		

How did you win the skateboarding medal?


CHALLENGE 2

	Answer	Code
1.		
2.		
3.		
4.		
5.		
6.		

How did you win the swimming medal?



CHALLENGE 3



	Answer	Code
1.		
2.		
3.		
4.		
5.		
6.		

How did you win the track medal?

Google Slides Prompt Students to use Decoder

Collect the Skateboarding Medal!

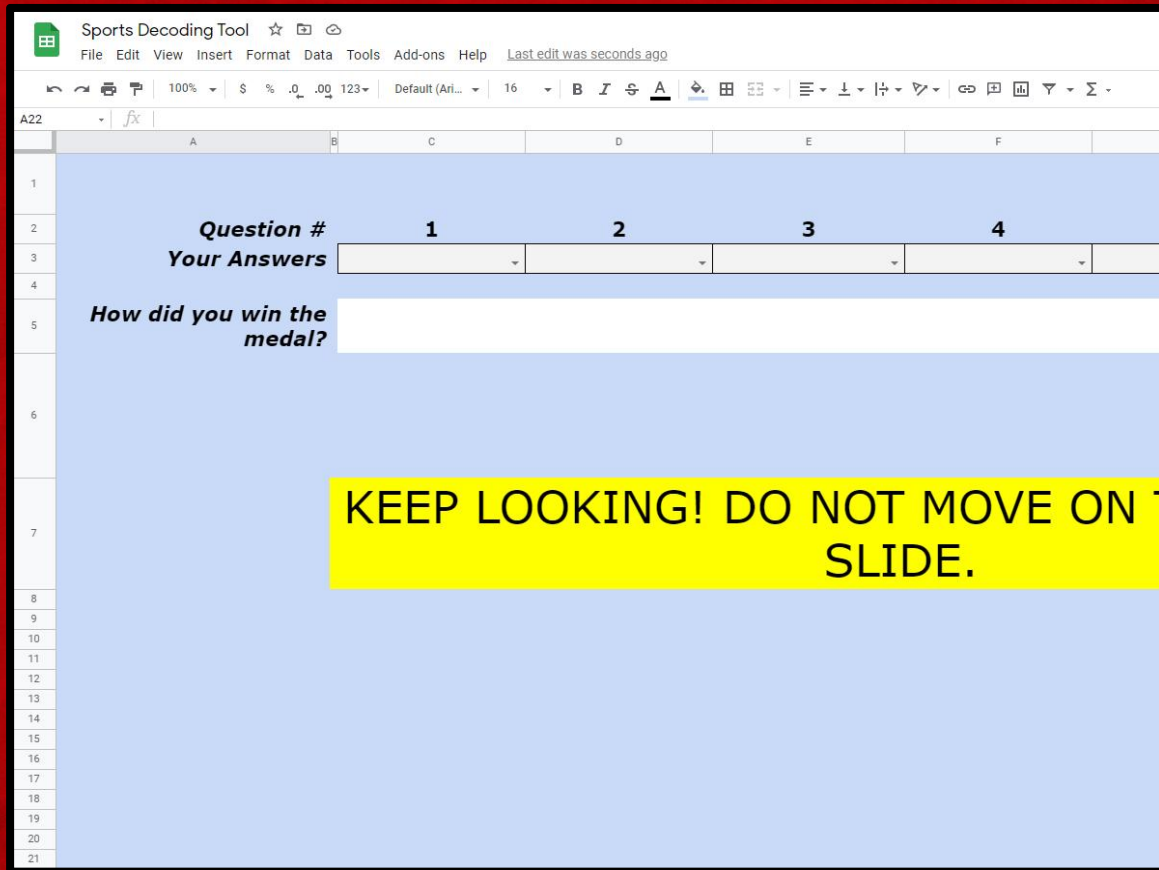
Enter your answers in the Sports Decoder to see if
you won the skateboarding medal.



DO NOT go to the next page until
prompted to do so by the
Decoder!

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Decoder in Digital Version is Self-Checking



The screenshot shows a Google Sheet titled "Sports Decoding Tool" with a menu bar (File, Edit, View, Insert, Format, Data, Tools, Add-ons, Help) and a toolbar. The sheet has columns A through F and rows 1 through 21. The interface is designed for a self-checking decoder.

Question #	1	2	3	4
Your Answers	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
How did you win the medal?	<input type="text"/>			

A yellow box at the bottom of the sheet contains the text: KEEP LOOKING! DO NOT MOVE ON TO SLIDE.