4th Grade

MEASUREMENT CONVERSIONS

ZOO ESCAPE ROOM

MagiCore

PRINTABLE • GOOGLE • WEBSCAPE™

Print & Digital Options

Printable Directions

Materials:
- Printed cards for each team
- Computer or Tablet for Videos (optional)
- Scrap Paper (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 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.

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START
ZOO ESCAPE ROOM
MagiCORE

Digital Directions

Materials:
- Google Slides link for each student
- Google Sheets link for each student

Duration: Approximately 80 minutes. You can also split this up into four 20-minute sessions, having students complete one challenge per day.

Directions:
Assign your students the Google Slides and Google Sheets Digital Escape Room challenge. Students work through each challenge in the slides. Students input their code into the Google Sheet to self-check their answers. The Google Sheet will prompt students to check their work or move forward to the next challenge. Complete all four challenges to receive the Catch an Elf Certificate.

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 #2

1. Solve each place value problem.
2. Record answers on your brochure.
3. Check your answers in the Escape the Zoo Decoder.
4. Put the photo of the elephant into your zoo album.
5. Scan the QR code in the corner of the next page.
6. Move on to challenge #3.

2. Elton the elephant's weight is shown below. Which statement correctly describes the relationship between the outlined digits below?

12,6⬚9⑥

a. The 6 in the rectangle is 10 times greater than

1. The two largest ⬚ and Elliot. The zoo ⬚ which elephant w⬚ that correctly co⬚ comparing their ⬚

12,696

Elton's weight
(in pounds)

a. <
b. >
c. =
d. +

Challenge #3

1. Solve each measurement problem.
2. Record answers on your brochure.
3. Check your answers in the Escape the Zoo Decoder.
4. Put the photo of the monkey into your zoo album.
5. Scan the QR code in the corner of the next page.
6. Move on to challenge #4.

1. A baby proboscis monkey weighs 3 pounds. How many ounces is this?

   a. 36 ounces
   b. 45 ounces
   c. 54 ounces
   d. 48 ounces

2. Marvin the monkey loves to sleep in his hammock. Today, he slept in his hammock for $4\frac{1}{2}$ hours. How many minutes did Marlin spend in his hammock today?

   a. 240 minutes
   b. 244 minutes
   c. 270 minutes
   d. 180 minutes

3. The table below shows the lengths of different monkeys' tails in meters and centimeters. Which measurement belongs in the empty space in the table?

Monkey type	Tail length (m)	Tail length (cm)
Howler	0.73	73
Macaque	0.85	85
Baboon		61
Chimpanzee	0.53	53

a. 6.1
b. 0.61
c. 0.061
d. 61.0

Video Tell the Story

Four 4th Grade Math Skills & Challenges

Zoo Escape Room

1. Challenge #1: Solve the multiplication problems to hear the bears' question.

2. Challenge #2: Solve the place value problems to hear the elephants' question.

3. Challenge #3: Solve the measurement problems to hear the monkeys' question.

4. Challenge #4: Solve the problems with fractions to hear the camels' question.

Interactive

Drag and drop the photo of the bear into your zoo album.
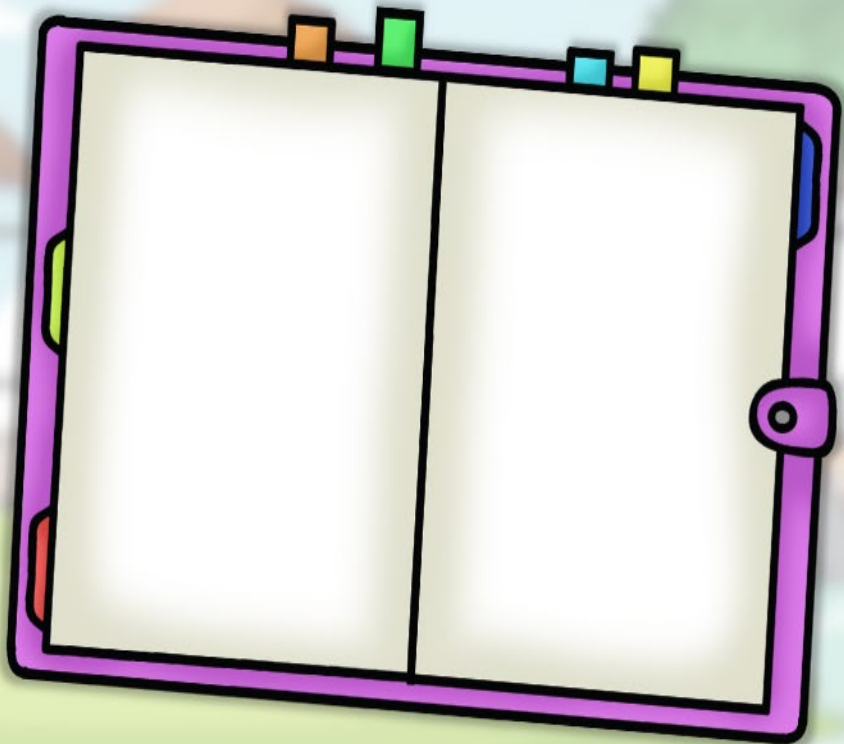
Challenges are Quick

Solve the Problem

Each bear in the bear exhibit eats 16 pounds of food per day. If there are 8 bears in the exhibit, how much food do the bears eat in total in one week?

a. 962 pounds

b. 788 pounds

c. 896 pounds

d. 874 pounds

Drag to circle your answer

Standards - Based Questions

Solve the Problem

The zookeepers feed the elephants in the exhibit a diet of grass, leaves, fruit, and tree bark. The amount of each type of food the elephants are fed in one month is shown in the table below. When rounded to the nearest hundred, which two foods are fed to the elephants in equal amounts?

Food type	Grass	Leaves	Fruit	Bark
Amount	2,019 lbs.	1,954 lbs.	2,063 lbs.	2,180 lbs.

a. Grass and Fruit

and Leaves

and Fruit

and Bark

Drag to circle your answer

Challenge #1

1. Solve each multiplication problem.
2. Record answers on your brochure.
3. Check your answers in the Escape the Zoo Decoder.
4. Put the photo of the bear into your zoo album.
5. Scan the QR code in the corner of the next page.
6. Move on to challenge #2.

1. Each bear in the bear exhibit eats 16 pounds of food per day. If there are 8 bears in the exhibit, how much food do the bears eat in total in one week?

    a. 962 pounds
   b. 788 pounds
    c. 896 pounds
    d. 874 pounds

2. There are 4 bear cubs in the exhibit. Each bear cub weighs approximately 65 pounds. What is the total weight of the bear cubs?

    a. 260 pounds
    b. 320 pounds
    c. 300 pounds
    d. 280 pounds

3. When a black bear stands on its hind legs, it can be as tall as 72 inches. The multiplication area model below could be used to find how tall 12 black bears standing on top of one another would be. Which number should go inside the circle?

	70	2
10	700	◯
2	140	4

    a. 140   c. 12
    b. 720   d. 20
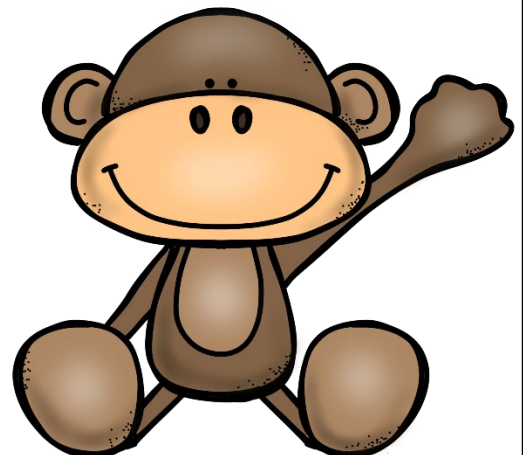
Standards - Based Questions

Solve the Problem

The table below shows the lengths of different monkeys' tails in meters and centimeters. Which measurement belongs in the empty space in the table?

Monkey type	Tail length (m)	Tail length (cm)
Howler	0.73	73
Macaque	0.85	85
Baboon		61
Chimpanzee	0.53	53

a. 6.1

b. 0.61

c. 0.061

d. 61.0

Drag to circle your answer

©Paula Beckner

Webscape™

CHALLENGE #2

1. Solve each multiplication problem about the elephants.

2. Answer the questions correctly to reveal the clue.

3. Add the picture of the elephants to your zoo album and move on to the next challenge.
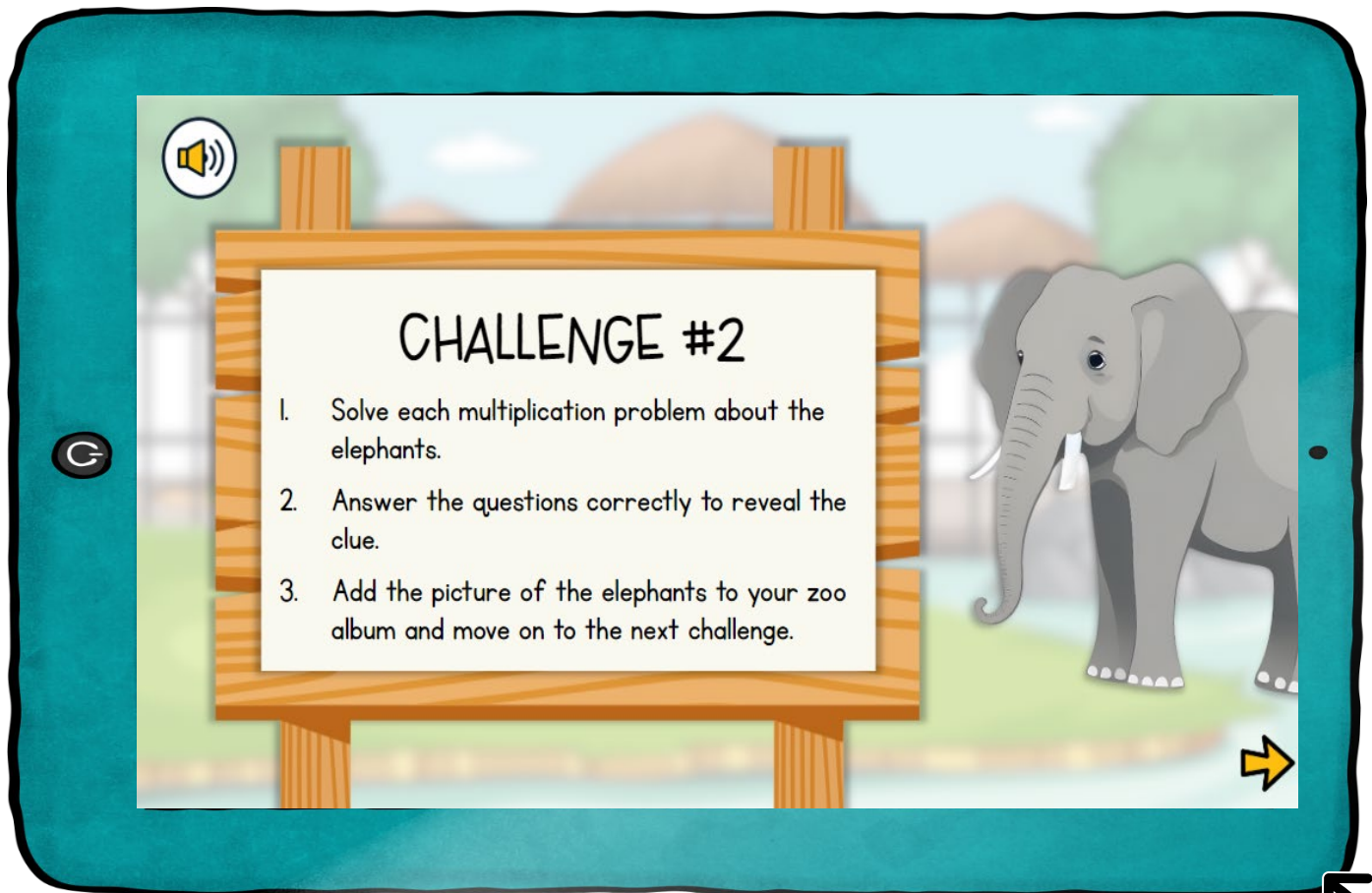
Most immersive and easy-to-follow experience. Students follow directions with the click of a button.

Webscape™

Click on each clue to answer the questions. Answer carefully, because the right answers will give you the clues to solve the challenge!

What question do the monkeys have for you?

| CLUE #1 | CLUE #2 | CLUE #3 |
| CLUE #4 | CLUE #5 | CLUE #6 |

Includes option for audio on directions and questions.

Webscape™

OH NO!

Something is wrong.
Double check your answers!

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

Webscape™

2

Marvin the monkey loves to sleep in his hammock. Today, he slept in his hammock for $4\frac{1}{2}$ hours. How many minutes did Marlin spend in his hammock today?

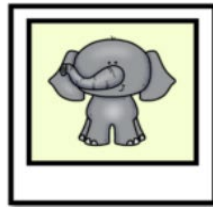|	
240 minutes	270 minutes
244 minutes	180 minutes

Questions review key 4ᵗʰ grade math skills.

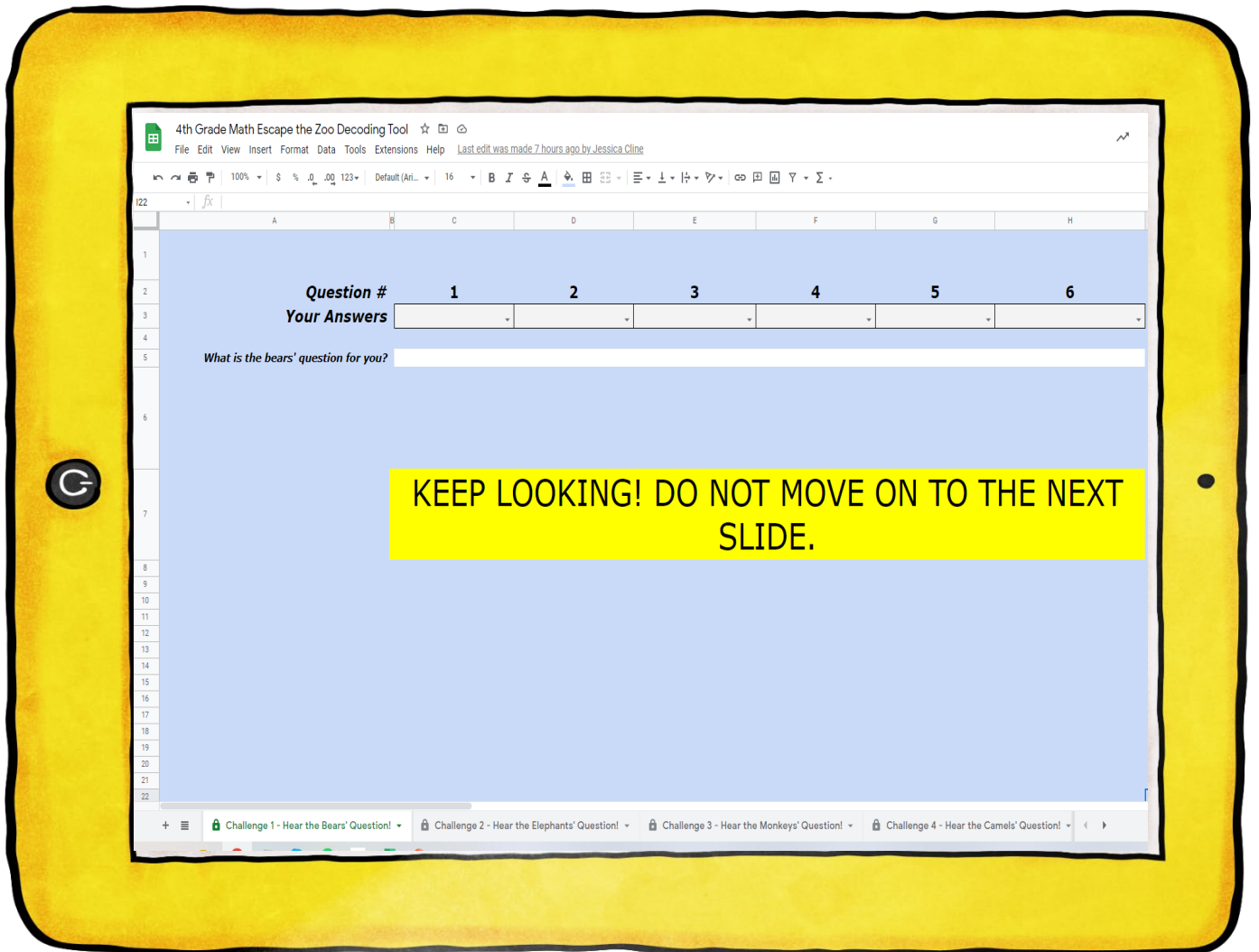# Google Slides Prompt Students to use Decoder

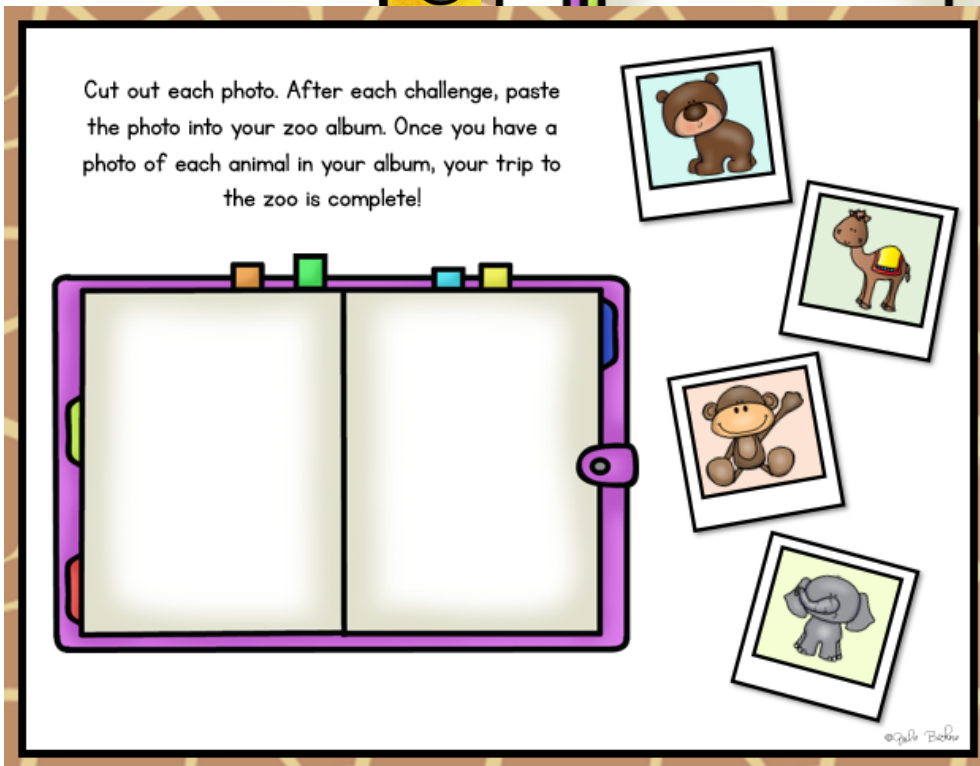## WELL DONE!

Your answer has satisfied the elephants' curiosity!
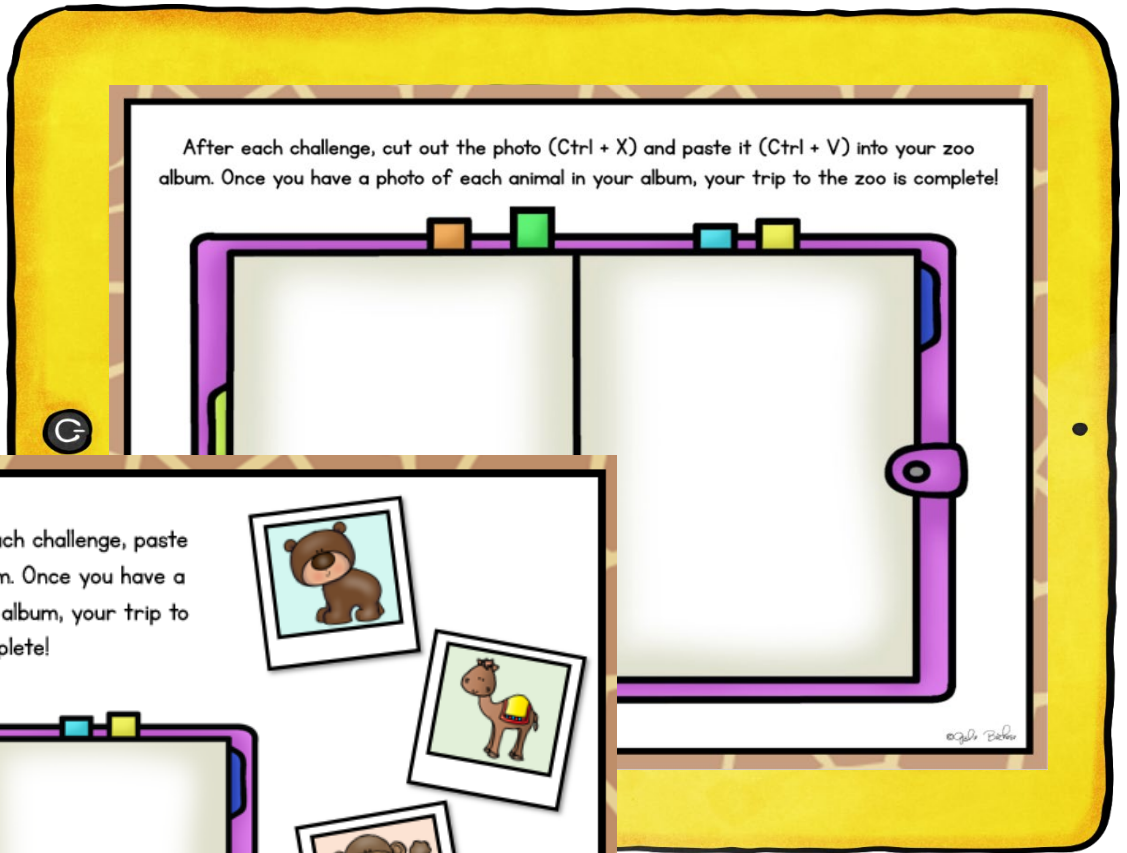
Cut (Ctrl + X) and paste (Ctrl + V) the photo of the elephant into your album. Then, continue on to the next challenge.

Decoder in Digital Version is Self-Checking

Interactive Elements

After each challenge, cut out the photo (Ctrl + X) and paste it (Ctrl + V) into your zoo album. Once you have a photo of each animal in your album, your trip to the zoo is complete!

Cut out each photo. After each challenge, paste the photo into your zoo album. Once you have a photo of each animal in your album, your trip to the zoo is complete!
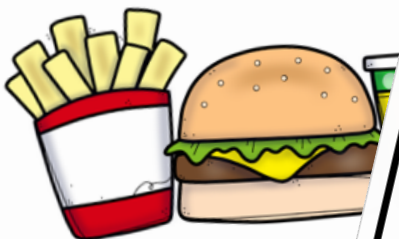
Printable Version Includes "Ooops!" Challenges

OOPS!
You're stuck in a long concessions line!

YOU MUST STAY MINUTES. NO

OOPS!
The sun is shining in your eyes, and you can't see!

YOU MUST BE BLINDFOLDED FOR 5 MINUTES. NO USING YOUR EYES DURING THIS TIME!

Printable Version Includes Recording Brochure & Decoder

CHALLENGE 1

	Answer	Code
1		
2		
3		
4		
5		
6		

What is the bears' question for you?

_____
_____

CHALLENGE 2

	Answer	Code
1		
2		
3		
4		
5		
6		

What question do the elephants want to ask?

_____

CHALLENGE 3

	Answer	Code
1		
2		
3		
4		
5		
6		

What question do the monkeys have for you?

_____
_____

ESCAPE THE ZOO

Use the following codes for each challenge to solve

	question 1	question 2	question 3	
Challenge 1	a = Does b = Why c = Do d = How	a = humans b = bears c = eat d = zoo	a = near b = because c = cubs d = really	
Challenge 2	a = How b = When c = Did d = Where	a = goes b = did c = has d = was	a = trunk b = since c = the exhibit d = the elephant	d = zoo

	question 1	question 2	question 3	question 4	question 5	question 6
Challenge 3	a = Why b = Who c = When d = What	a = can b = in the c = does d = bananas	a = hanging b = a c = because d = until	a = monkey b = around c = chasing d = into	a = wrench b = tail c = chimpanzee d = business	a = self b = around? c = eat? d = watching?
Challenge 4	a = Where was b = How did c = Why would d = Who says	a = one b = the c = since d = going back	a = hump b = exhibit c = straw d = collect	a = afterwards b = can c = on top of d = break	a = the camel's b = without c = on top of d = running	a = back? b = straw? c = ride? d = animals?

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