



STEAM ELEMENTARY WORKSHEET

NAME: _____

DATE: _____

S = Science: How High Can You Go?

The KC Wheel is about 150 feet tall.

1. If each ride lasts about 12 minutes, how many times could it go around in one hour?

A: _____

2. The wheel spins in a circle. What is the scientific name for this kind of motion?

- a) Back-and-forth
- b) Circular motion
- c) Zigzag

T = Technology: Behind the Scenes

The KC Wheel uses electric motors and computers to move safely.

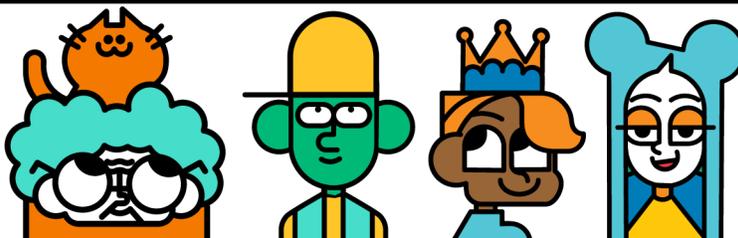
3. What do you think the computer does during the ride?

E = Engineering: Build It Strong!

Engineers designed the KC Wheel to be tall and safe.

4. Draw a line to match the job to what they do:

JOB	WHAT THEY DO
Civil Engineer	Designs the base and support of the wheel
Mechanical Engineer	Designs how the wheel turns and moves
Electrical Engineer	Works on power and lights for the wheel





A = Art: A View from the Top!

5. Imagine you're 150 feet up on the KC Wheel. What do you see?

Draw your view below:

M = Math: Wheel by the Numbers

Each gondola holds up to **6 people**. The KC Wheel has **36 gondolas**.

6. What's the maximum number of people who can ride at one time?

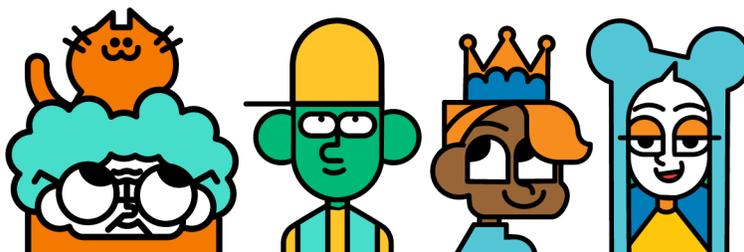
A: _____

7. If your group has 120 students, how many gondolas will you need to fit everyone (6 people per gondola)?

A: _____

Bonus Question:

What's something you learned today about how science, technology, engineering, art, or math helps make the KC Wheel work?





ANSWER KEY

S = Science

1. 5 times

→ $60 \text{ minutes} \div 12 \text{ minutes} = 5 \text{ rotations}$ per hour

2. b) Circular motion

T = Technology

3. Sample answers:

- It controls the speed of the wheel
- It ensures the wheel stops and starts safely
- It monitors safety sensors

E = Engineering

4. Matching:

JOB	WHAT THEY DO
Civil Engineer →	Designs the base and support of the wheel
Mechanical Engineer →	Designs how the wheel turns and moves
Electrical Engineer →	Works on power and lights for the wheel

A = Art

5. Drawing will vary. Expect students to illustrate a high-up view (e.g., city, buildings, cars, sky, etc.)

M = Math

6. $36 \text{ gondolas} \times 6 \text{ people} = 216 \text{ people}$

7. $120 \text{ students} \div 6 \text{ per gondola} = 20 \text{ gondolas}$

