Make as many unique rides as possible!

Get **one point for each unique combination** of ride type and energy source (see page 2).

Make a ride, get a point, then transform it into a new one. **Get the most points to win.**

COMPONENTS

TeacherGeek Parts:

The maximum number of parts that can be used on any single design.

NAME	QTY	PICTURE
Base	1	
Gear Sets with shafts 10, 20, 40, 50 tooth	1 set	
Dowels 30cm(12in.) SKU 1821-32	10	
Blocks SKU 1821-34	5	
Strips 30cm(12in.) SKU 1821-31	2	
Slide Stop 8cm(3in.) SKU 1821-49	1	

Materials You Supply:

- **Rubber Bands**
- **Recycled Materials** (optional)

RIDE TYPES

Can you make them all?

Spinning
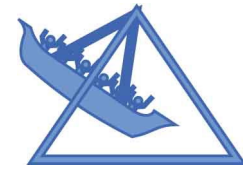Riders move in a circular motion.

Heights
Riders move from ground-level to a higher elevation.

Bouncing
Riders move up and down.

Swinging
Riders sway back and forth.

Launching
Riders are thrown through the air!

Linear Motion
Riders move in a straight line.

Isn't it 2 types?

It spins. It's tall. But **you can only choose one ride type per design.**

ENERGY SOURCES

How can you make your ride move?

Potential Energy: Potential Energy is stored energy that can make objects move. You can use two types:
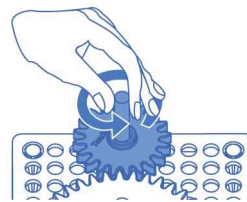
Elastic

Gravitational

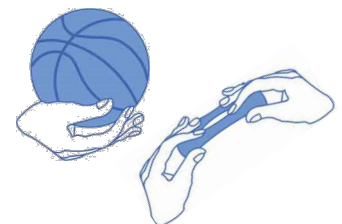Stretching rubber bands stores energy as **Elastic Potential Energy**.

Lifting objects so they can fall, slide, or roll stores energy as **Gravitational Potential Energy**.

Human Energy: Human Energy is energy that *you* are adding to your contraption.

You can only use **Human Energy** to **turn an input gear**. You can't use human energy in any other way.

Human Energy **does not include** energy transferred to **Potential Energy**.

RIDE SCORE SHEET
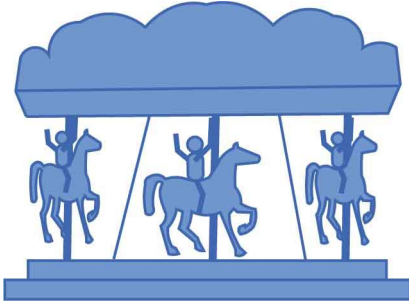## AMUSEMENT PARK CHALLENGE

GEARS TINKER SET

TeacherGeek

Name: _____ **Date:** _____

SCORE [ ]

Get your ride approved to get a point, then transform it into a new ride!
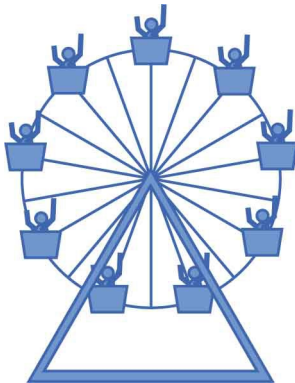
Spinning

Human

Adult Approval
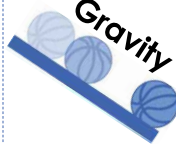
Gravity

Adult Approval

Elastic
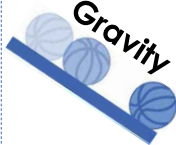
Adult Approval

Heights

Human

Adult Approval

Gravity

Adult Approval

Elastic

Adult Approval

Bouncing

Human

Adult Approval

Gravity

Adult Approval

Elastic

Adult Approval

RIDE SCORE SHEET
AMUSEMENT PARK CHALLENGE

GEARS TINKER SET

TeacherGeek
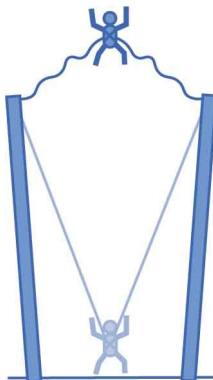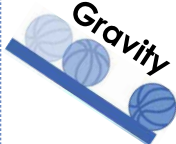
Swinging
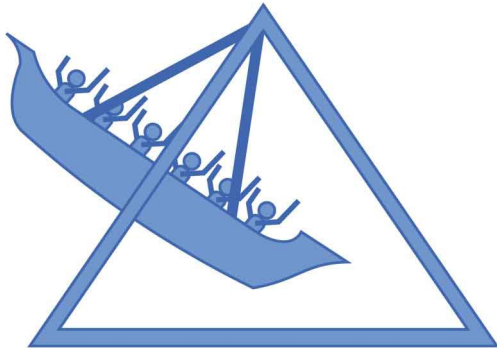
Human

Adult Approval
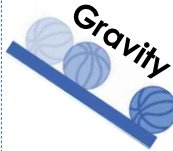
Gravity

Adult Approval

Elastic

Adult Approval

Launching
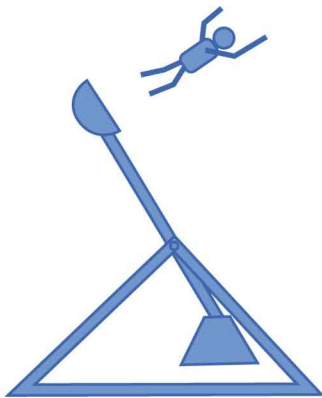
Human

Adult Approval
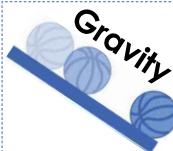
Gravity

Adult Approval

Elastic

Adult Approval

Linear Motion
(straight line)

Human

Adult Approval

Gravity

Adult Approval

Elastic

Adult Approval