

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.

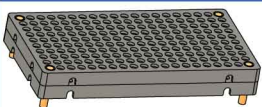
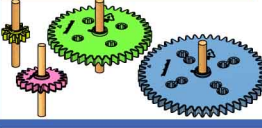




Get the most points to win.



COMPONENTS

TeacherGeek Parts:

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

NAME	QTY	PICTURE
Base	1	 Build the Base and Gears with Shafts in the Set-Up Guide!
Gear Sets with shafts 10, 20, 40, 50 tooth	2 sets	 Documents available at teachergeek.com/gears
Dowels 30cm (12in.) SKU 1821-32	7	
Blocks SKU 1821-34	10	
Strips 30cm (12in.) SKU 1821-31	2	
Slide Stop 8cm (3in.) SKU 1821-49	1	

Materials You Supply:

- Rubber Bands
- Recycled Materials (optional)



Classroom Overview and additional documents available at teachergeek.com/gears

RIDE TYPES

Can you make them all?



Spinning

Riders move in a circular motion.



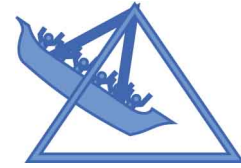
Heights

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:

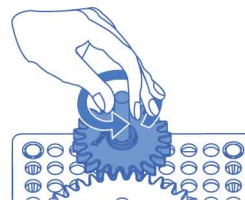


Stretching rubber bands stores energy as **Elastic Potential Energy**.

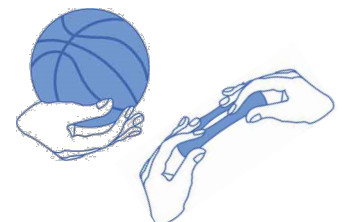


Lifting objects so they can fall, slide, or roll stores energy as **Gravitational Potential Energy**.

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

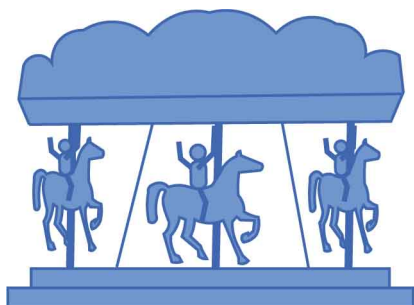


Name: _____ Date: _____

SCORE

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

Spinning

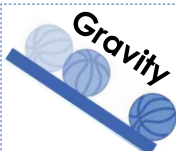


Human



Adult Approval

Gravity



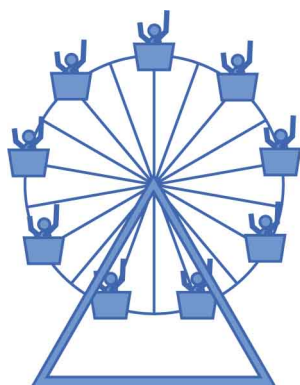
Adult Approval

Elastic



Adult Approval

Heights

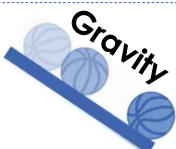


Human



Adult Approval

Gravity



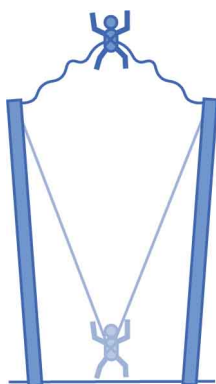
Adult Approval

Elastic



Adult Approval

Bouncing

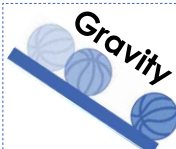


Human



Adult Approval

Gravity



Adult Approval

Elastic



Adult Approval

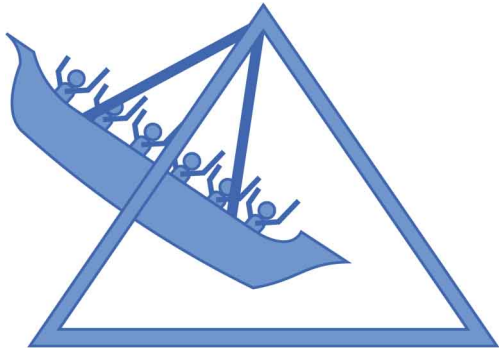
RIDE SCORE SHEET

AMUSEMENT PARK CHALLENGE

GEARS TINKER SET



Swinging

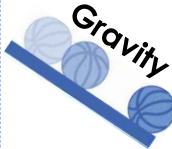


Human



Adult Approval

Gravity



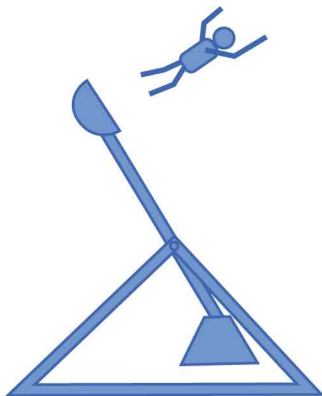
Adult Approval

Elastic



Adult Approval

Launching

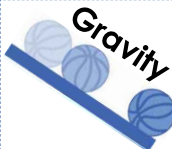


Human



Adult Approval

Gravity



Adult Approval

Elastic



Adult Approval

Linear Motion

(straight line)

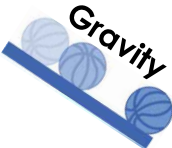


Human



Adult Approval

Gravity



Adult Approval

Elastic



Adult Approval