**THE CHALLENGE**

**Breaking fast…with breakfast?**
Using your rubber band racer, ferry an egg from **Target A** to **Target B** without cracking it. Keeping your egg safe also requires **speed** - will you deliver brunch on time?

Before you start... Make sure you have built a **Rubber Band Racer** for use on this challenge.

Documents & Supplies at: teachergeek.com/learn

**THE DESIGN**

Experiment with materials to protect your egg. Remember, your racer must move with only the **stored (potential) energy** in its rubber bands.

Your racer has **traction** (friction) between its wheels and the floor. How can you reduce this resistance?

**CONSTRAINTS**

**(rules & limits for your design)**

**Challenge Supplies:**
Racer (from Build Guide), yardstick, fragile object, stop watch, target materials, recycling bin materials

**Teacher's Note:**
Find more information on setting up targets and running this challenge in the **Racer Classroom Overview**.

**Difficulty:** Hard

* Compare with Science Olympiad’s “Scrambler” Event

**Allowable Materials:**
- TeacherGeek components
- Recycling bin materials
- other available materials: (e.g. wood, 3D printing, plastic)

**Ground Rules:**
- Distance must be measured at front wheel(s)
- Must use at least **two** TeacherGeek wheels

**Time Limit:** Fill in how much time you have to complete this challenge
Mark your run time, distance score & whether the egg breaks or remains intact.

**Final Score = Run Time + Distance Score - Penalties (in seconds)**

The time it takes the racer to travel from the 0.5-meter line to the 8.5-meter line (or target).

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**Did your egg fall or break?**
Multiply score by two.

**Did your racer leave the lane or touch the lane barrier?**
Multiply score by two

Use a **ramp** or launcher mechanism to propel your racer out the gate!

**Barrier Materials:** Mark your track with tape, string, cardboard, wood planks

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