



WOW! on Wheels – STEM Labs Rolling Things

Materials and Set-Up

The WOW! on Wheels activity kit includes:

- 1 ramp
- 1 4 rung ladder
- 1 2 rung ladder
- 1 gray track
- 1 pack of stickers
- 1 book
- 1 disc

- 1 wooden truck
- 1 wooden sedan
- 1 wooden convertible
- 1 wooden weight car (with pole)
- 1 crash box

- 1 wolf
- 15 washers
- 1 measuring tape
- 1 pack of mini post-its
- 1 pack of post it flags
- 1 pack of velcro buttons



The binder contains an original copy of all necessary handouts. Please make as many copies as you need.

These additional materials are optional (not included) for the challenge:

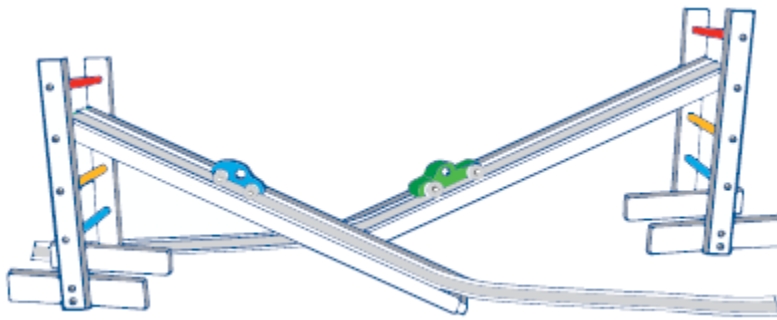
- Straw
- Brick
- Sticks



Ramp Set Up

It is suggested to set up the cars and ramps area prior to beginning the challenge and all of the lessons.

It is also suggested to set up the ramps to allow enough space between them for two student pairs to work easily in the area. If possible, arrange the ramps so they face in opposite directions (see picture). This will minimize the interference between pairs. A ramp with its track is approximately 8 feet long.



Lesson 1

- 1 copy of “Letter from EarthToy Designs”
- Chart paper or whiteboard (not included)
- Markers (not included)
- 3 toy cars (convertible, truck, sedan)
- 1 ramp
- 1 ramp support
- 1 track
- 1 copy of “Our Team”

Lesson 2

- 1 copy of “Letter from EarthToy Designs”
- Chart paper or whiteboard (not included)



- Markers (not included)
- 3 toy cars (convertible, truck, sedan)
- 1 crash box
- 1 ramp
- 1 ramp support
- 1 track
- 1 copy of “Our Results”
- Car stickers (for “Our Results”) – you can make these using sticker labels

Lesson 3

- 3 toy cars (convertible, truck, sedan)
- 1 ramp
- 1 ramp support
- 1 track
- Car stickers – you can make these using sticker labels
- 1 packet of sticky flags
- 1 packet of sticky notes (2 7/8” x 2 7/8”)

Lesson 4

- 3 toy cars (convertible, truck, sedan)
- 1 ramp
- 1 ramp support
- 1 track
- 1 packet of sticky flags
- 1 measuring tape
- 1 crash box
- 1 copy of “Ramp Height Results”
- Car stickers (for “Ramp Height Results”) – you can make these using sticker labels
- 1 measuring tape



Lesson 5

- 1 copy of “Letter from EarthToy Designs”
- Chart paper or whiteboard (not included)
- Markers (not included)
- 1 weight car
- 1 ramp
- 1 ramp support
- 1 track
- 15 washers
- 1 copy of “Car Weight Results”
- 1 copy of “Testing Car Weight”

Lesson 6

- The Three Little Pigs’ Sledding Adventure book
- Samples of straw and sticks (optional – not included)
- 1 brick (optional – not included)

Lesson 7

- The Three Little Pigs’ Sledding Adventure book
- 1 copy of “Letter from EarthToy Designs”
- 1 weight car
- 1 ramp
- 1 ramp support
- 1 track
- 1 toy wolf
- 1 packet of sticky flags
- 15 washers
- 1 copy of “Wolf Tails – Knock the Wolf Over”
- 1 copy of “Wolf Tails – Leave the Wolf Standing”
- 1 copy of “The Best Crasher”