

Prep Instructions

These are the instructions for setting up the activity. Instructions for building and preparing each obstacle can be found in the *Obstacles* document.

Part I

The following items will be required for the prep of this part of the activity:

- materials for Part I obstacles of choice
- identifying markers (popsicle sticks, straws, coloured sheets of paper)

Step 1

Decide which obstacles will be used for the first part. Examples of Part I obstacles are:

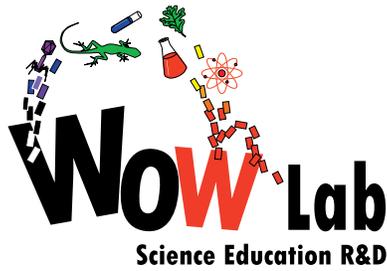
Vibrating Surface Station
Ramp and Masking Tape Parameter
Speed Bump
Archway
Water and Ramp
Seasons

Step 2

Construct the obstacles for Part I.

Step 3

Choose one or two obstacles that every car must pass in order to survive. For example, passing the Vibrating Surface Station and the Water and Ramp could be essential to survival. Find an identifying marker, such as coloured sheets of paper, popsicle sticks or straws. These will be given to students to keep track of whose cars survive the “must pass” obstacles. For the remaining obstacles, the cars may be allowed to survive even if they do not make it through successfully.



a WOW Lab

BLUEPRINT

Selection in Action - Prep Instructions

Part II

The following items will be required for the prep of this part of the activity:

- materials for Part II obstacles of choice
- identifying markers (popsicle sticks, straws, coloured sheets of paper)

Step 1

Decide which obstacles will be used for the second part. Examples of Part II obstacles are:

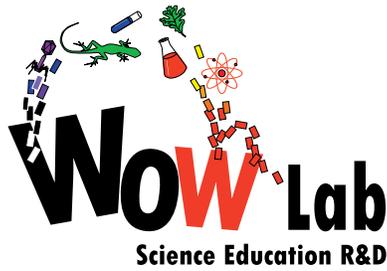
Ultraviolet Box
Monster Pendulum
Ramp/Path
Archway II
Hamster Wheel
Ramp and Bubble

Step 2

Construct the obstacles for Part II.

Step 3

Choose one or two obstacles that every car must pass in order to survive. For example, passing the Ultraviolet Box and the Hamster Wheel could be essential to survival. As with Part I, the identifying marker will be given to students whose cars survive the “must pass” obstacles. For the remaining obstacles, the cars may be allowed to survive even if they do not pass.



a WOW Lab

BLUEPRINT

Selection in Action - Prep Instructions

Immediately Before Class

Depending on the available class time, the entire *Selection in Action* activity can be completed in one day or it can be done over two days. If the activity will be completed over two days, Part II can be performed on the second day and the obstacles for Part II will need to be set up immediately before the second class period.

Step 1

Set up the obstacles for Part I. A large table or several desks pushed together works well. Alternatively, use individual student desks (one obstacle per desk). There should also be room on the floor for several of the obstacles. If performing the activity entirely in one day, set up the obstacles for Part II at this time.

Step 2

Cover the obstacles with a large blanket or tablecloth so that the students cannot see them. This is very important; the obstacles should in no way influence students during the car building process. If students are aware of the obstacles while building their cars, they might try and modify their vehicles to be better suited to the challenges.