

Collect Them All!

(Sold separately)



Off-Roader & Track



Starter Set

Build A Mega Track!



DISCOVER MORE SETS

For UK



[www.vtech.co.uk/
carboardracers](http://www.vtech.co.uk/carboardracers)

For AUS



[www.vtech.com.au/
carboardracers](http://www.vtech.com.au/carboardracers)



Monster Truck & Track



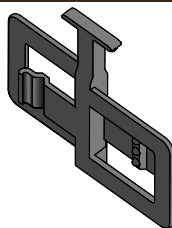
5639

COMPONENTS



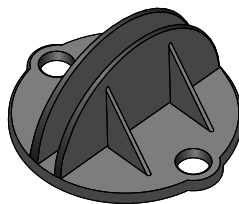
x1

C-02



x10

C-03



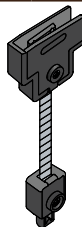
x10

T-01



x2

C-04



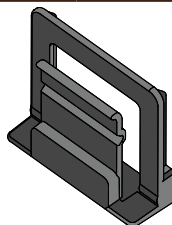
x2

T-02



x1

C-05



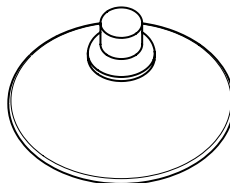
x2

T-03



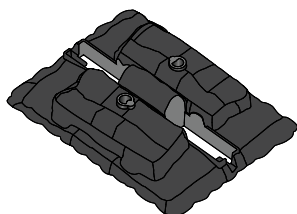
x1

C-06



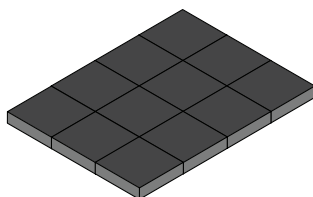
x2

C-01



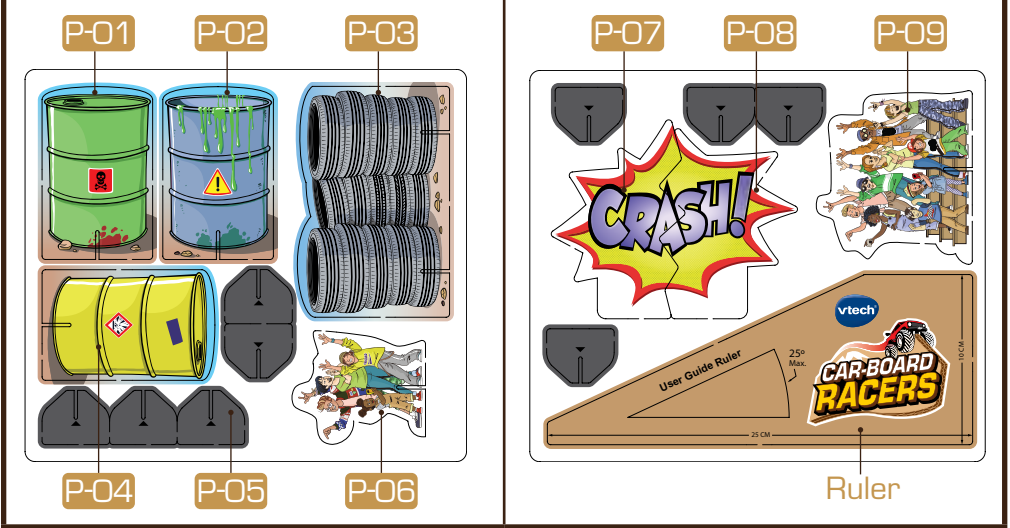
x1

C-07



x4

COMPONENTS

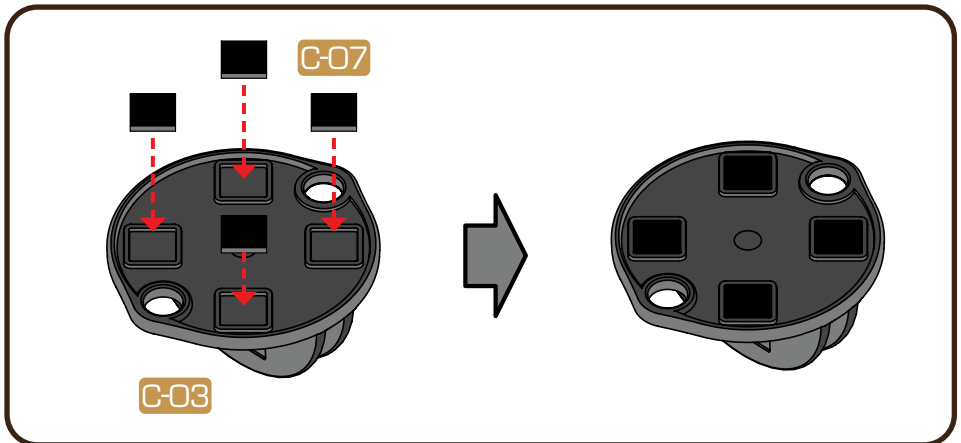


INITIAL ASSEMBLY

ASSEMBLY INSTRUCTIONS

With the **Car-Board Racers Monster Truck & Track**, safety comes first. Adult assembly required. For your child's safety, do not let them play with this toy until the initial assembly steps are completed.

Stick the rubber label under all the stands.



INITIAL ASSEMBLY

USING THE STANDS

P-01



P-05

P-02



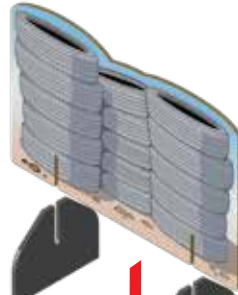
P-05

P-04



P-05

P-03



P-05

P-06



P-05

P-09

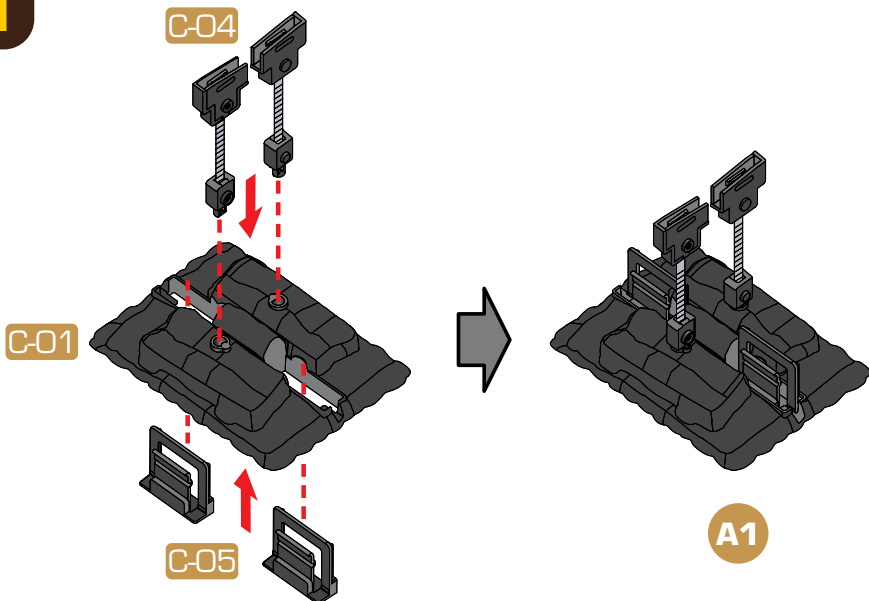


P-05

INITIAL ASSEMBLY

BUILDING SIGN SPLITTER STUNT

1



2



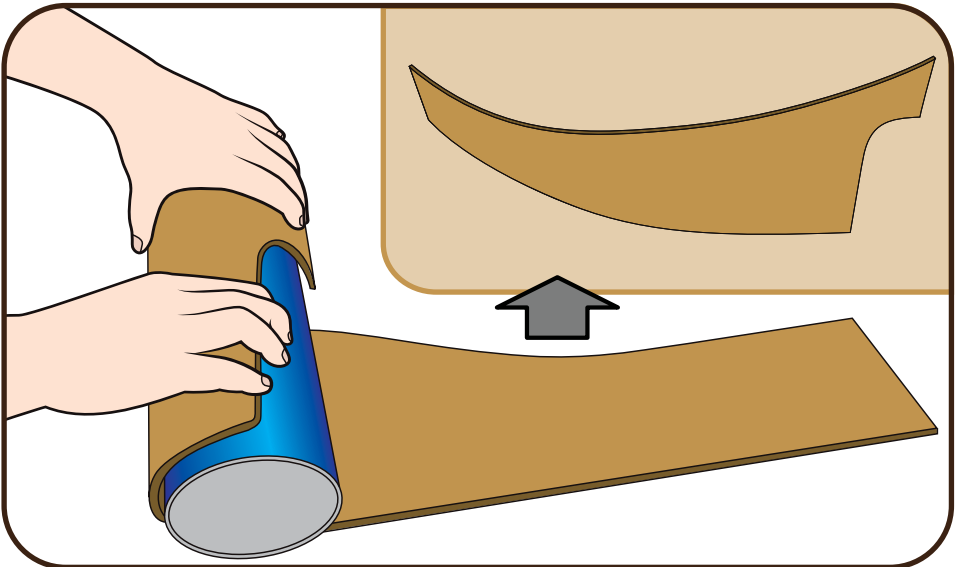
INITIAL ASSEMBLY

COLOUR THE CARDBOARD.



ROLL UP THE CARDBOARD.

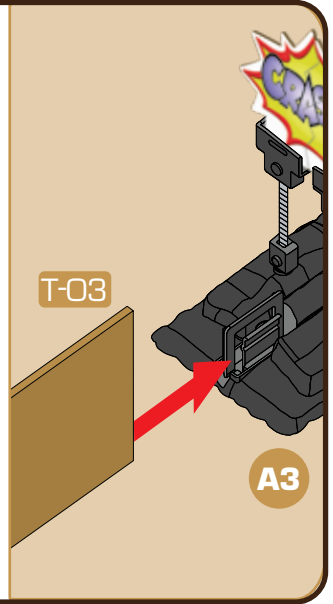
Roll T-01, T-02 and T-03 up with a can to make smooth curves.



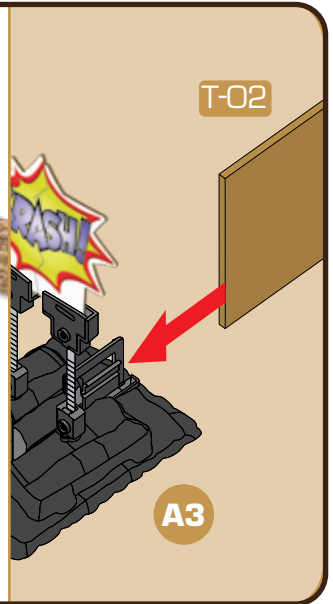
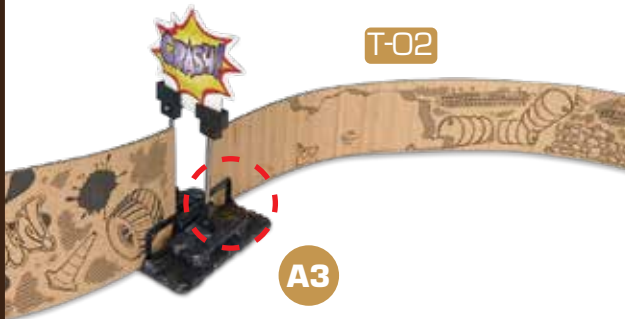
TRACK ASSEMBLY

BUILDING THE TRACK

1



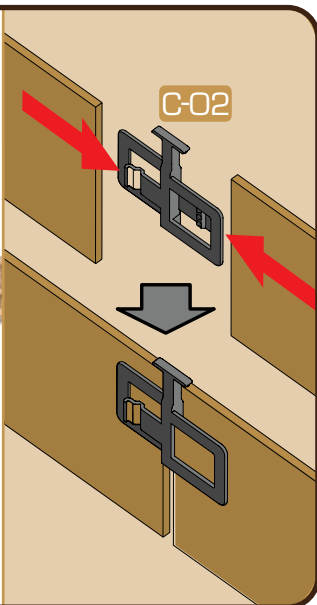
2



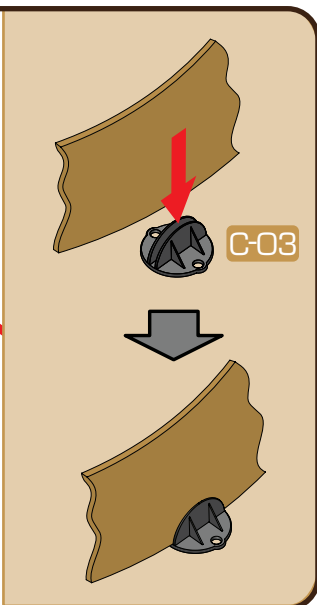
TRACK ASSEMBLY

BUILDING THE TRACK

3



4



TRACK ASSEMBLY

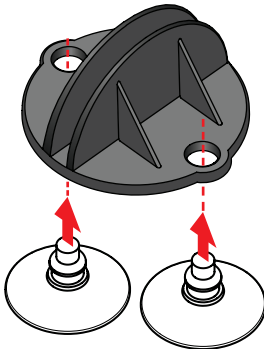
BUILDING THE TRACK

5

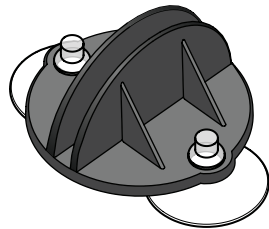


If necessary, add suction cups to one stand to make it stay firmly on the floor.

C-03



C-06



LET'S GO!

Switch the vehicle on and place it carefully on the track to start the fun.



DIY

Getting Started

Gather your DIY tools.

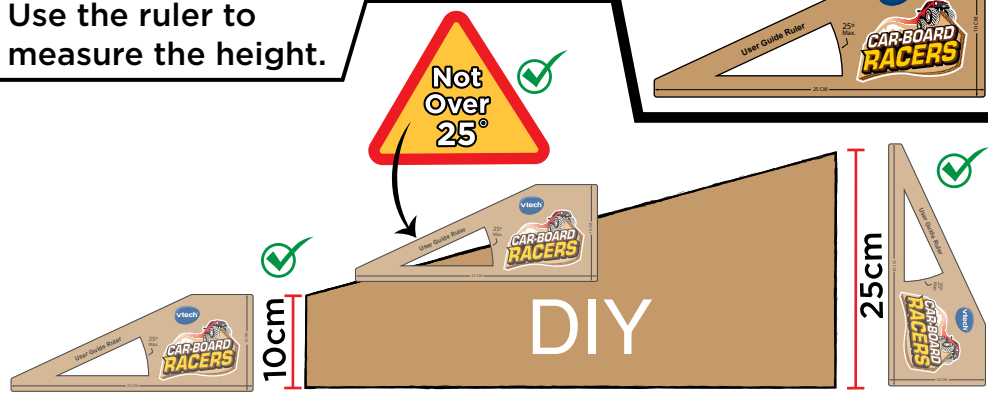


Warning: Adult supervision is required.

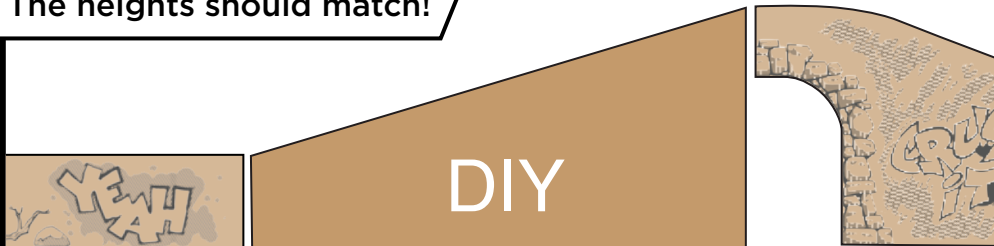
Upcycle any spare cardboard with thickness of approximately 6-8mm to make new tracks.



Use the ruler to measure the height.



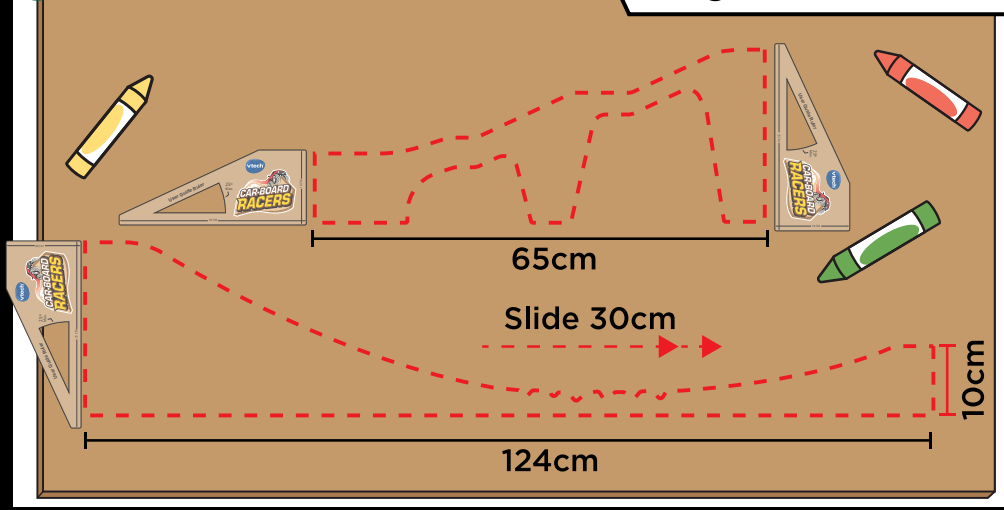
The heights should match!



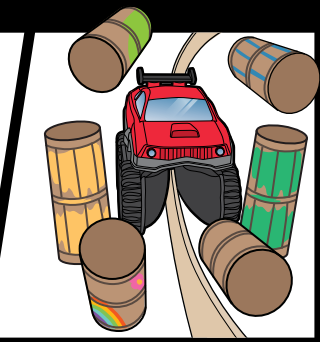
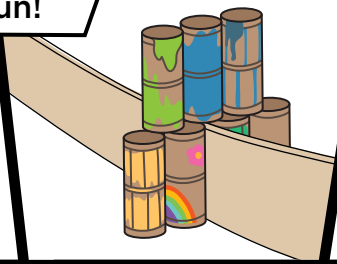
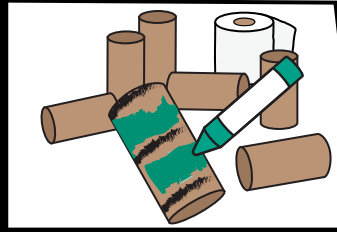
DIY

More Tracks, More Fun

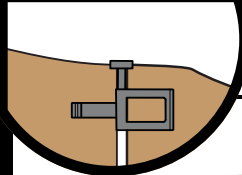
Design some DIY track.



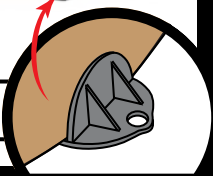
Use paper rolls and scrap paper to add some fun!

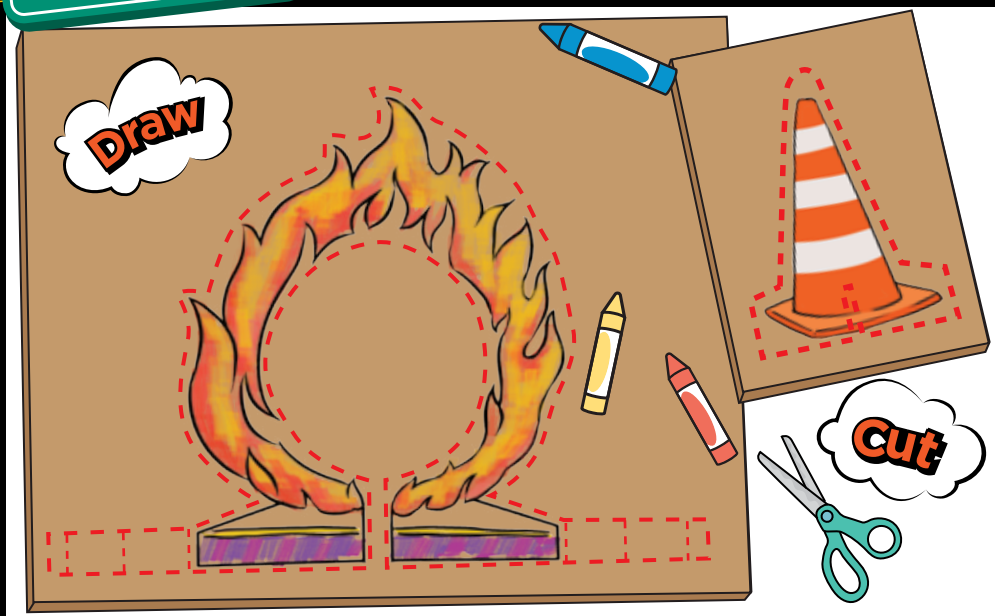


Join the tracks with connectors (C-02).

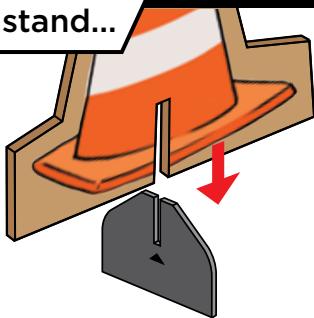


Use a stand (C-03) to stabilise.

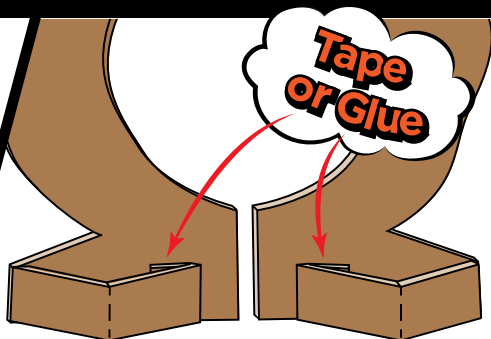




Don't forget the stand...

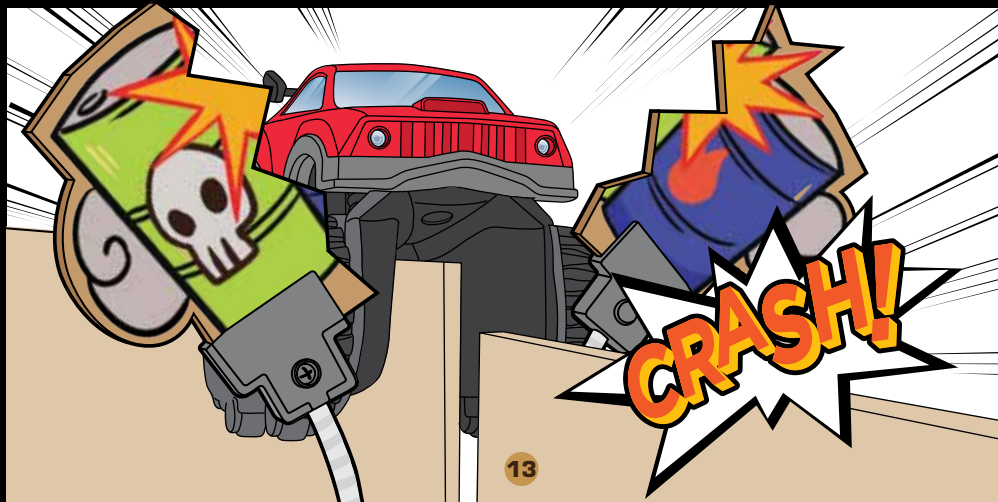
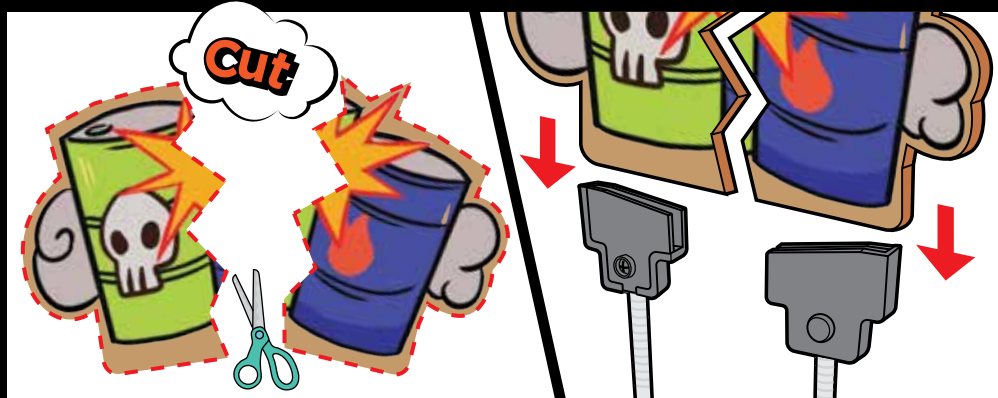


...or build the stand in.



DIY

Customise Your Crash



Think Like an Engineer!

The Engineering Design Process is a way of thinking to solve problems.

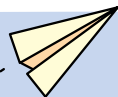
What Engineers Do?

- Design
- Build
- Fix things

1 Start with a question

Example

How can I make a paper aeroplane that flies across the room?



2 Plan and Design

There are no bad ideas in brainstorming.



Start by researching.



Write or sketch ideas.



Pick an idea to try.

Brainstorm

Throw plane harder

Try new folding method

Different colours of paper

Use thick paper

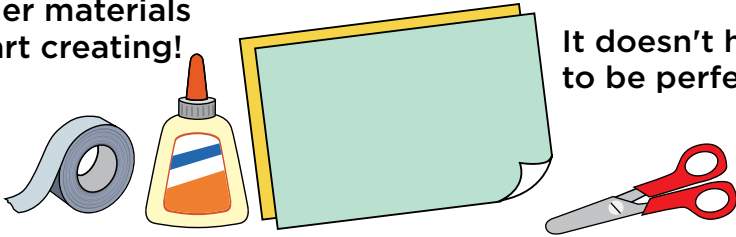
Change size of wings

Start to build

Think Like an Engineer!

3 Build

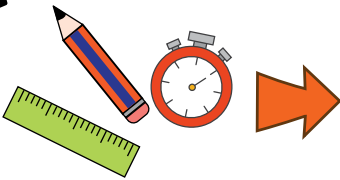
Gather materials & start creating!



It doesn't have to be perfect!

! Ask an adult for help with safety.

4 Test



Gather testing tools.

- Test your solution a few times.
- Take notes as you go.
- Set up testing environment.
- Test your solution in different ways.

5 Reflect and Improve

Hmm.. my idea didn't work.

I wonder why...

I have an idea to improve it!

I'll try wider wings next time.

- ? What went well?
- ? What could you do differently?

- Go back to the Plan and Design phase to make adjustments.
- Use what you learn on your next try.



Knowledge Pit Stop 1

- **Gravity** is the force that pulls objects to the Earth.
- When an object tries to go uphill, it must work harder to go against gravity.
- When an object goes downhill, it works with gravity.



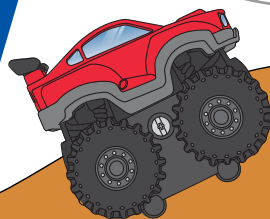
Engineering Challenge

1 Start with a question



How does the speed of a car change driving uphill versus downhill?

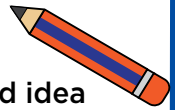
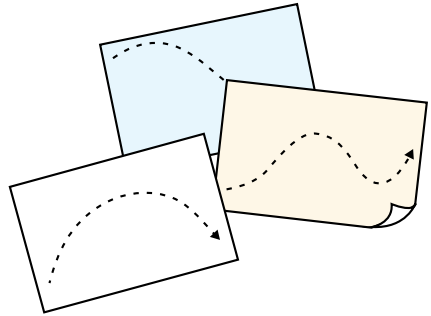
*Uphill, downhill
Hmm.. I wonder
which path is faster?*



2 Plan and Design

Sketch out track pieces with slopes that go uphill and slopes that go downhill.

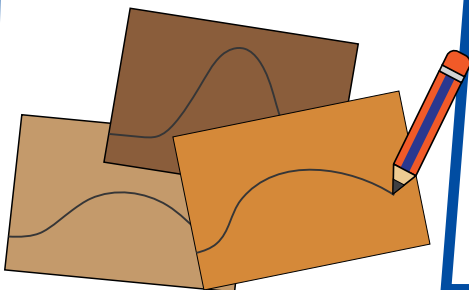
Try out slopes with different levels of steepness.



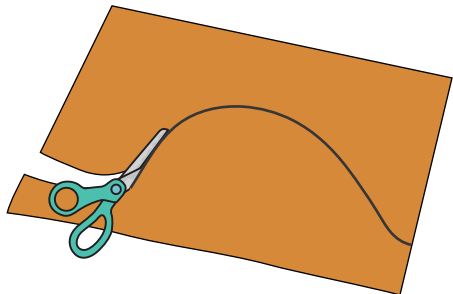
Pick an idea you'd like to try

3 Build

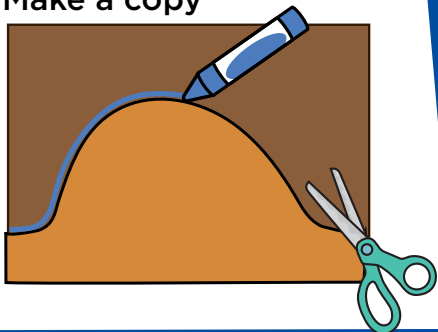
Step 1:
Draw your hill designs



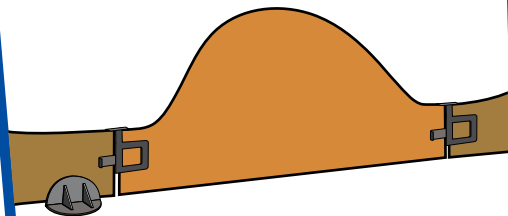
Step 2:
Cut your designs



Step 3:
Make a copy



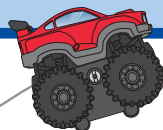
Step 4:
Assemble your track



4

Test

Faster going uphill or downhill?



Hill A

Hill B

Hill C

Hill D

Rank the speed at the top or bottom of the slope you created from **1** (fastest) to **4** (slowest)



5

Reflect



Is it faster for cars to go uphill or downhill?



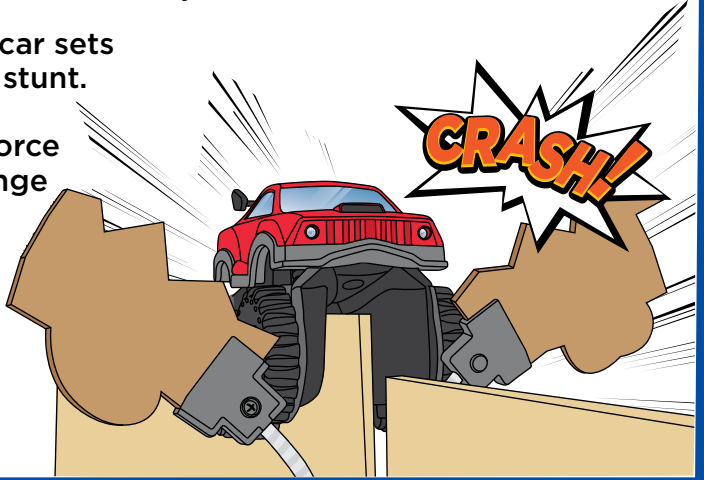
How does the steepness of the slope change the speed?



Can you adjust the copy to make each hill too steep to climb?

Knowledge Pit Stop 2

- When an object is fast, it has more **momentum and force** when it runs into another object.
- The force of the car sets off the car crash stunt.
- The amount of force applied can change the car crash stunt effect.



Engineering Challenge

? How can we set off the perfect confetti surprise?



2 Plan and Design

Design something to hold some confetti. Sketch out different designs to test.

What track design will make the car go faster?
Look back at [Challenge #1](#).

How can you store the confetti?

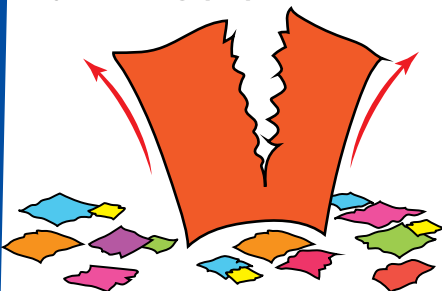
Try storing confetti on paper rolls
@ Page 10!



3 Build

Step 1:

Make your confetti by tearing paper



Step 2:

Find a way to hold the confetti



Step 3:

Build the track and place the confetti stunt where you want it



4 Test

Put the car on the track and test it out.
Adjust the track or the stunt if your confetti surprise isn't to your liking.



5 Reflect

- ? What changes did you make to create the perfect confetti surprise?
- ? What was challenging about getting the confetti surprise to work?
- ? What would you do differently next time?

Jr. Engineer

CERTIFICATE

Awarded to:



Date

Awarded by

