

Junior  
tech  
challenge

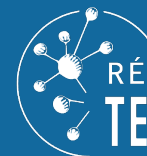
The practical  
side of  
science and  
tech



# READY, SET, ROLL!

2024-2025 EDITION

Activity 2 – Let's Get Rolling!



RÉSEAU  
TECHNOSCIENCE  
Together for a new scientific generation

# LET'S GET CREATIVE!

## WHAT CAN YOU USE TO BUILD THE WHEELS?

*Reminder: In Cycles 2 and 3, wheels should be made of common circular objects.*

**Corks**



**Compact discs**



**Bottle caps**



**Lids of any kind**



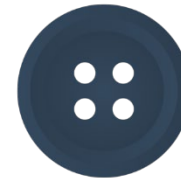
**Empty spools of thread**



**Coasters**



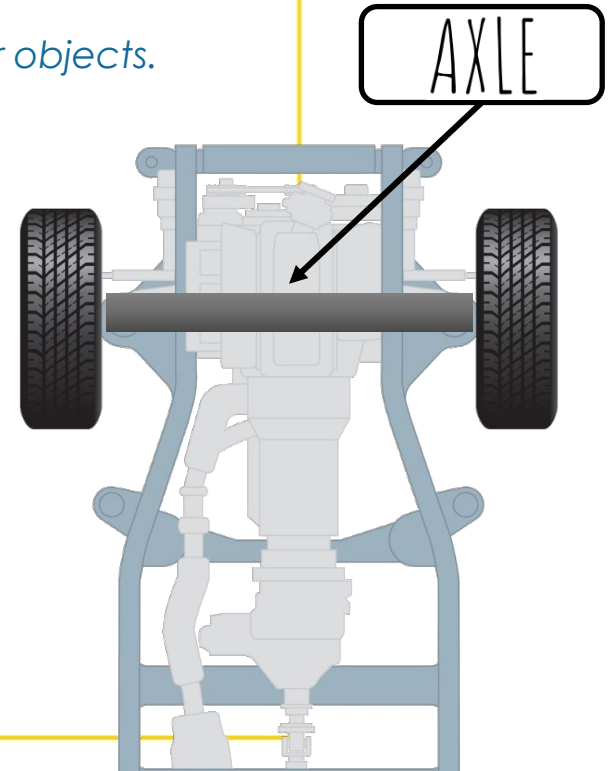
**Buttons**



# LET'S GET CREATIVE!

## WHAT CAN YOU USE TO BUILD THE AXLES?

*Reminder: In Cycles 2 and 3, axles should be made of common circular objects.*



# LET'S GET CREATIVE!

WHAT CAN YOU USE TO CONNECT THE WHEELS TO THE AXLES?

Now, how would you link the wheels of your vehicle together?



LET'S GET CREATIVE!

WHAT CAN YOU USE TO CONNECT THE WHEELS TO THE AXLES?

And how will you attach the axles to the wheels?



## LET'S GET CREATIVE!

WHAT CAN YOU USE TO CONNECT THE WHEELS TO THE AXLES?

You'll also need to think about attaching your wheels and axles to your chassis. How would you do that?



# LET'S GET CREATIVE!

WHAT CAN YOU USE TO CONNECT THE WHEELS TO THE AXLES?

Paper fasteners



Tape



Nuts and bolts



Beads



Pipe cleaners



White glue



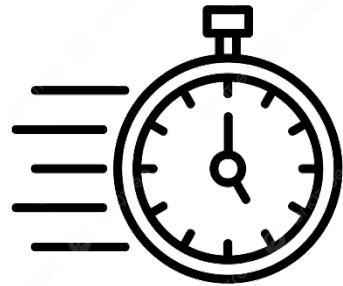
Hot glue



Modeling clay

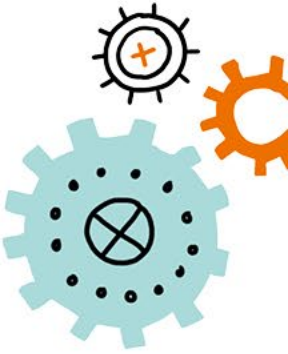


**NOW THAT YOU'VE GOT THE TOOLS, BUILD  
YOUR PROTOTYPE AND TEST IT OUT!**



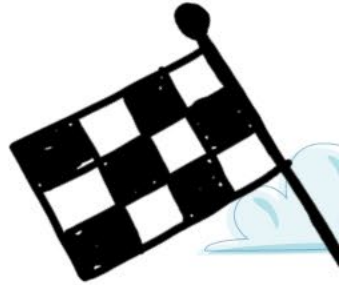
TECHNOSCIENCE.CA

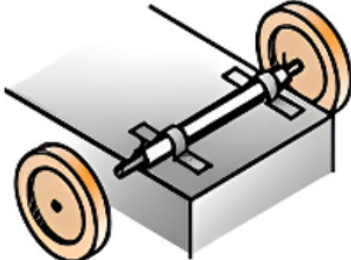
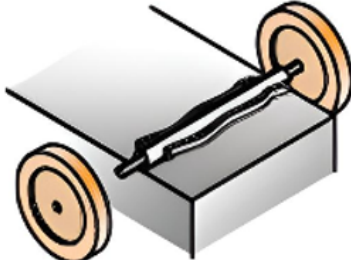
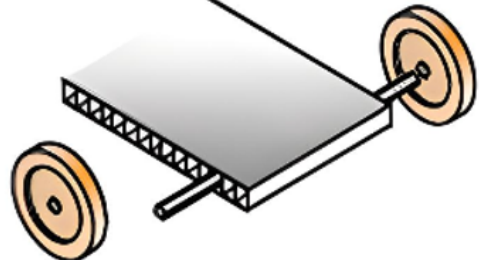
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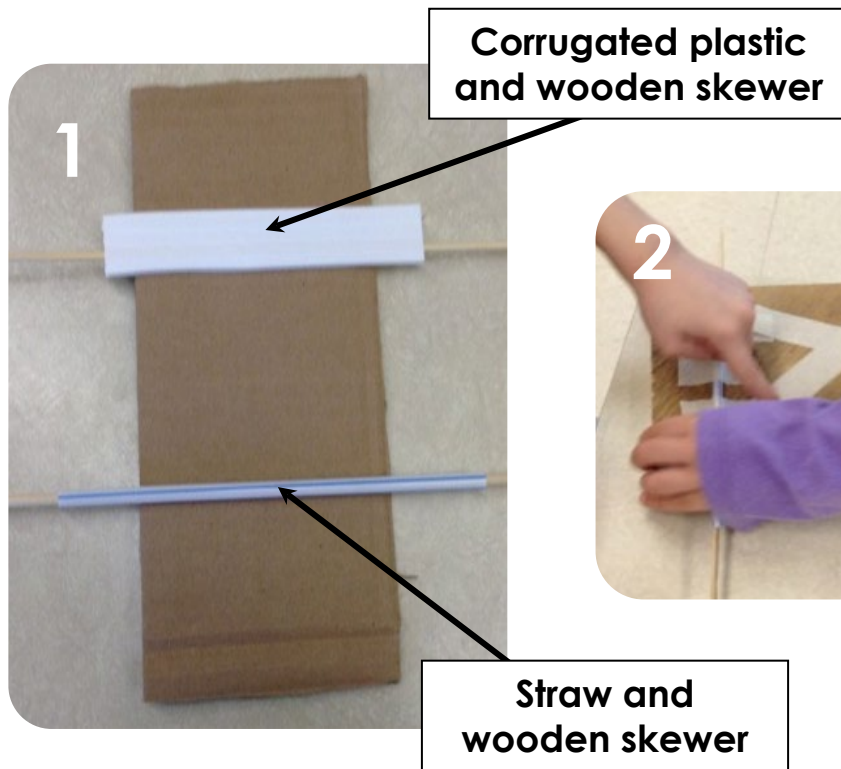
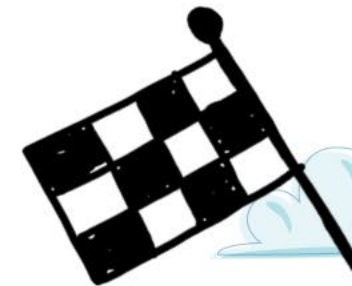
# IDEAS FOR WHEELS AND AXLES



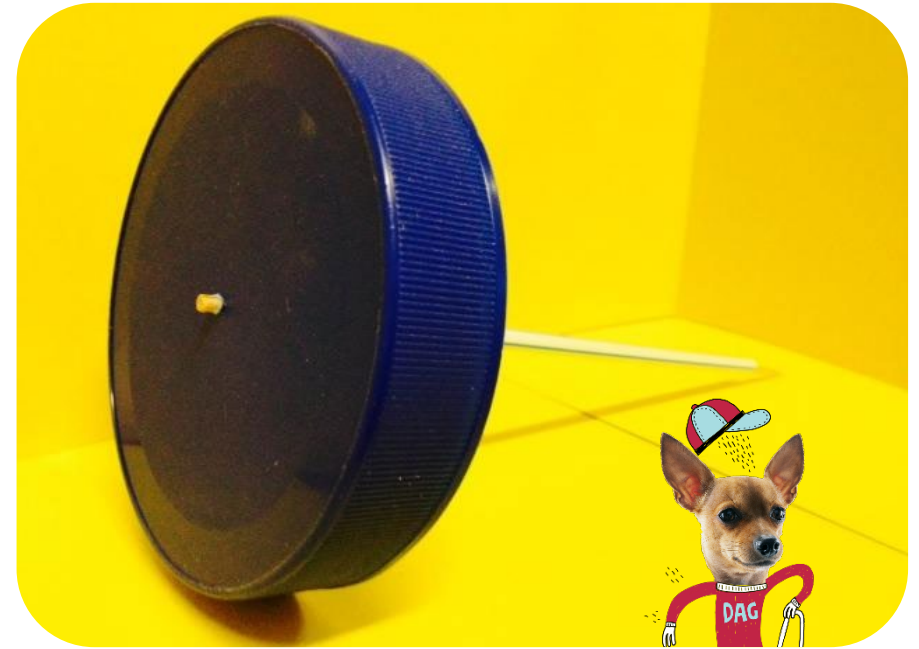
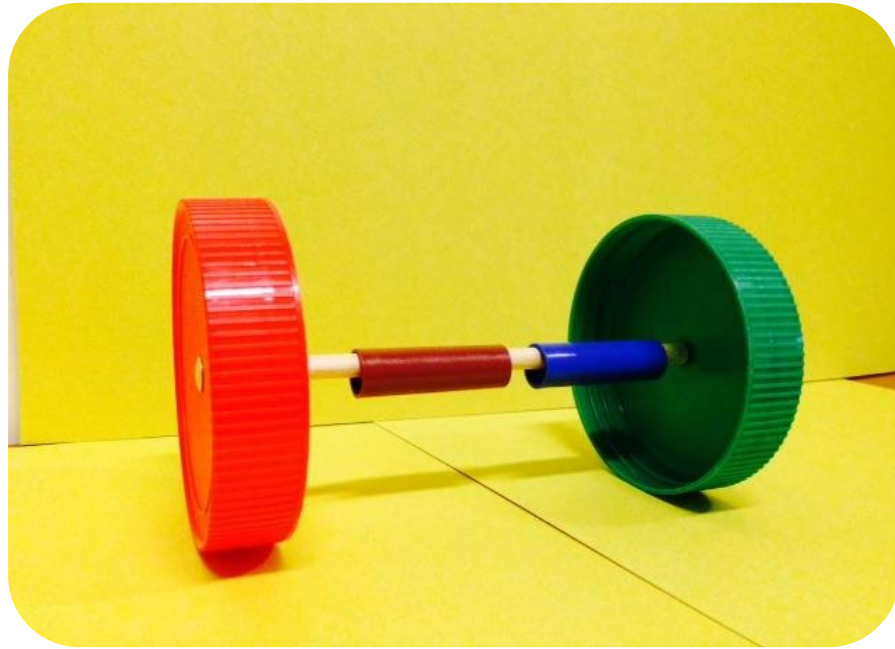
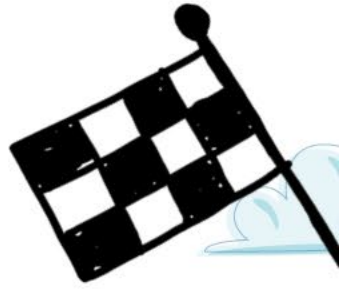
<b>Straw or tube with tape</b> (movable axle)	<b>Straw or tube with modeling clay</b> (movable axle)	<b>Insert a rod into the corrugated plastic board</b> (fixed or movable axle depending on tube diameter)
		



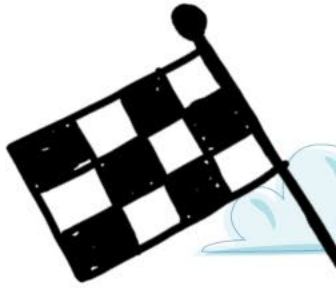
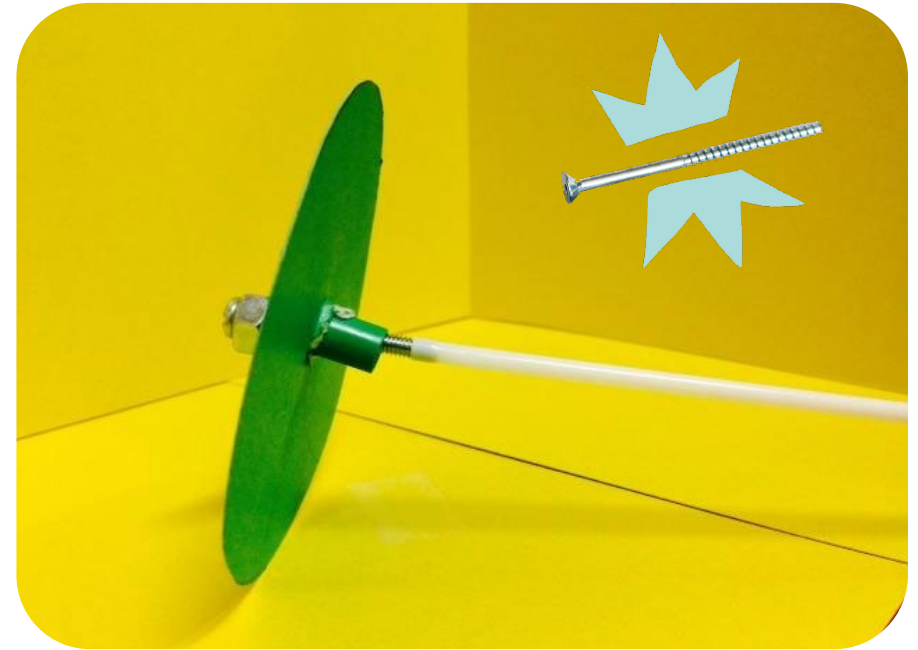
# IDEAS FOR WHEELS AND AXLES



# IDEAS FOR WHEELS AND AXLES



# IDEAS FOR WHEELS AND AXLES



# LET'S REVIEW

## What happens when...

- the wheels are not properly fastened to the axle?
- the axle is not fastened to the center of the wheel?
- the axles are not the same size?
- the axles are not parallel?
- the wheels on the same axle are different sizes?
- the size (thickness) of the wheels varies?
- wheel diameter varies?

