



# Catapult Challenge

Designed for  
Ages 8-13yrs



## Curriculum Connection:

### Computational Thinking for Digital Technologies

Progress  
Outcome  
One



Progress  
Outcome  
Two



Progress  
Outcome  
Three



Progress  
Outcome  
Four



Progress  
Outcome  
Five



### Designing and Developing Digital Outcomes

Progress  
Outcome  
One



Progress  
Outcome  
Two



Progress  
Outcome  
Three



## Aim:

This is a big classroom challenge. Your students will work individually or in pairs to design and create a Strawbees catapult and a projectile - an artistic polystyrene masterpiece!

This challenge encourages students to develop their problem solving skills and creativity to create a functional (and innovative) catapult.

## Time:

1-2 class periods

For more information please contact Natalie Tubman

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## Materials:

- ✓ [Strawbees School Kit](#)
- ✓ [Polystyrene Balls](#)
- ✓ [Pom Poms](#)
- ✓ [Moving Eyes](#)
- ✓ [Mini Glue Gun](#)
- ✓ [Mini Glue Gun Refill Sticks](#)
- ✓ [Rubberbands](#)

\*OfficeMax is happy to help you order any additional items for your STEAM lesson

## Lesson Plan:

1. Begin the lesson by discussing battle techniques, both now and in the past. Discuss how catapults were used in battle and what made them effective (or ineffective!).
2. As a class, start to sketch out what they consider to be good catapults. Do their sketches have things in common? Discuss levers and pulleys.
3. After the sketches have been analysed, show them the tools they have available to them ([Strawbees School Kit](#)). Show them how the connectors bed and how the straws connect.
4. Give the students time to explore how to create their catapult. If you have students that are stuck on ideas, show them the example from the Strawbees book.
5. Once the students have made the catapults, it's time to make their ammunition! Give each child a polystyrene ball and show them all the available crafts.
6. Allow them time to create their masterpiece.
7. Lastly, have a competition. Who can fire their ammunition the furthest? Or have a class game of Battleships. The options are endless!

### Suggested OfficeMax Materials:

2503751      STEAM Strawbees School Kit

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With almost 14 years of teaching experience, Natalie is passionate about e-learning and helping to implement technology into the New Zealand education system.

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