

# Athens V Sparta

## How can we reinforce materials to make a strong structure?

### What will we be learning?

- To select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) accurately
- To apply our understanding of how to strengthen, stiffen and reinforce more complex structures →
- To generate, develop and explain ideas for products to meet a range of needs
- To evaluate work, adapting and improving where appropriate

### What will you be doing?

- We will look at different weapons used and identify what makes them strong.
- We will explore how to stiffen and reinforce materials to help with our designs
- We will sketch a few different designs with labels for materials and techniques required eg stiffen, reinforce
- Identify the equipment required and explore the different purposes they are used for
- We will make our siege weapon (trebuchet)
- We will evaluate our siege weapon

### Prior Learning:

- Making a strong structure (model of a house) – Unity in the Community (Y1)
- Using mechanisms in structures – Come Fly with me! Arctic Circle (Y2)
- Using levers and linkages – That’s All Folks (Y3)

### Future Learning:

- Using levers and linkages – Law and Order (Y4)
- About Viking battles – Viking Warrior (Y3)
- How to add electronics to make a structure move – A World of Bright Ideas (Y6)

### Words you will be using

#### design

a plan or drawing before something is made



#### model

a make of a proposed structure, on a smaller scale

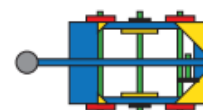
#### siege weapon/trebuchet

a type of catapult that uses a long arm to throw



#### plan view

a view of a design from above



#### timber

wood prepared for use in building



#### washer & screw



#### saw



#### construct

use materials and tools to create your design by following your plan