

# As engineers, how can we move items to the top of the lighthouse?

## STICKY KNOWLEDGE FOR HISTORY

1. Grace Darling was born in 1815
2. Grace's family lived inside Longstone Lighthouse on the Farne Islands, Northumberland.
3. Grace's father was the lighthouse keeper
4. Longstone Lighthouse was built on bare rock, 1m above the North Sea
5. Grace took her turn at the top of the lighthouse keeping watch, day and night, for ships in trouble at sea.
6. On 5 September 1838 the steamship *Forfarshire* set off from Hull to Dundee - the steamship hit Big Harcar rock and broke in two
7. Grace and her father rowed through the strong tide and winds, as the North Sunderland lifeboat was unable to get there due to the harsh conditions, to rescue people.
8. The story of the wreck and the daring rescue was on the front pages of all the newspapers and Grace became famous for risking her life to save others in the face of great danger.
9. Grace died of tuberculosis April 1842, 4 years after the famous rescue
10. Sea rescue has improved and is now much safer - life jackets are worn, boats are motorised and are easily launched, waterproof clothing is worn and GPS is used.

## STICKY KNOWLEDGE FOR SCIENCE

1. Plants need air, light, water, nutrients and warmth to make them grow well.
2. Germination is when a plant starts to grow.
3. Plants can make their own food in their leaves using sunlight
4. The main parts of a plant are the roots, stem, leaves and flower.
5. Some plants like cooler temperatures.
6. Some plants like warmer temperatures
7. All plants need regular water. Without water, seeds and bulbs will not germinate. Too much water can also damage plants.
8. All plants need space to grow.
9. Leaves need space to expand and complete their food making job.
10. Squashed roots create small plants.

## ESSENTIAL VOCABULARY

<b>Pulley</b>	A wheel that carries a flexible rope, cord, cable, chain, or belt on its rim.	<b>Tuberculosis</b>	An infectious disease that most often affects the lungs and is caused by a type of bacteria
<b>Shipwreck</b>	The destruction of a ship by sinking or breaking up.	<b>Germination</b>	The process by which a plant grows from a seed into a seedling
<b>Lighthouse</b>	A tower with a beacon light to warn or guide ships at sea.	<b>Navigate</b>	To plan and direct the route of a ship or other transport.
<b>Coastguard</b>	An organisation that keeps watch on coastal waters.	<b>Port</b>	A town with a harbour.
<b>Engineer</b>	A person who designs, build or maintains engines, machines or structures.	<b>Beacon</b>	A fire or light in a high position.

## COMPUTING

Programming A -  
Robot Algorithms

## MUSIC

Music Express:  
Pattern & Toys

## PSHE

SCARF Scheme: Rights  
and respect.

## RE

KAPOW RE: What is a  
prophet?

## MATHS

Multiplication &  
division - 1 week  
Length & height - 2  
weeks  
Mass, capacity &  
temperature - 3  
weeks

## PE

Ball & racket  
Team Games

## ART/DT

" Make a lighthouse  
with a working  
pulley

## CORE TEXT

Writing to entertain

## HOOK

Trip to Portland  
Lighthouse

## END PRODUCT

Making a working  
lighthouse

