



Lighthouses

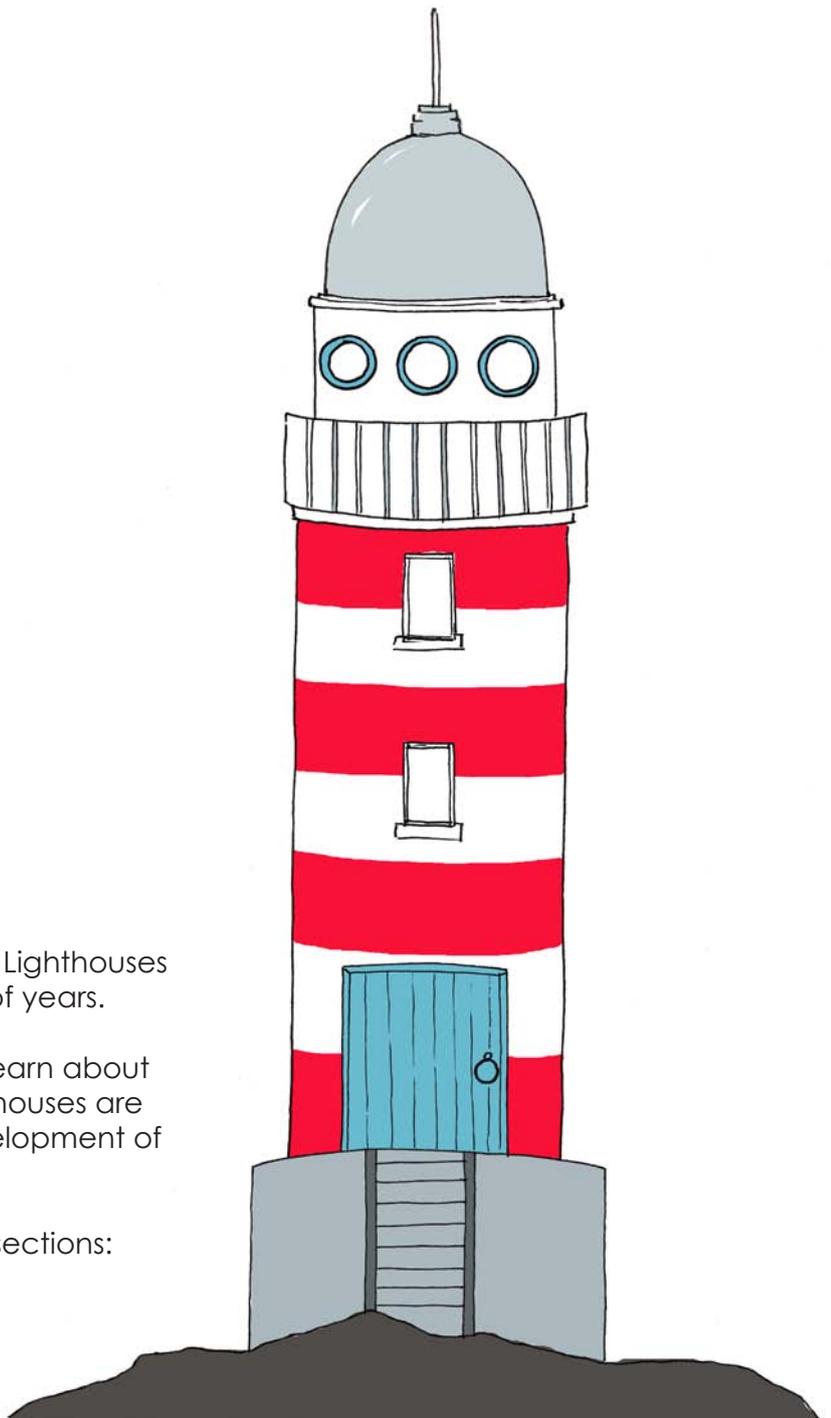
a creative resource for primary schools
and young people under 12

This project pack explores the topic of Lighthouses and their long history over thousands of years.

Students will have the opportunity to learn about the history of the lighthouse, how lighthouses are constructed and about the early development of lighthouses in Scotland and Fife.

The project pack is divided into three sections:

- background information
- museum activities
- creative activities





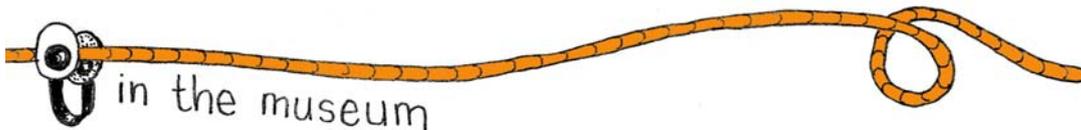
Lighthouses



This sheet contains background information which can be discussed with your group and includes some interesting information about the successful (and unsuccessful) design of lighthouses. This information may be of use to older groups undertaking the lighthouse design task.

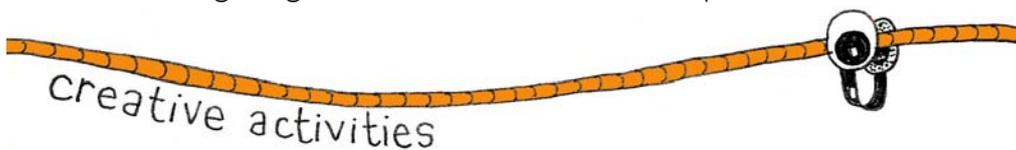
Students might want to discuss which type of materials are best for lighthouses, why they are built and what life would be like as a lighthouse keeper.

"The Lighthouse Keeper" series of books by Ronda and David Armitage is also available to read and discuss with students.



Younger groups can explore the museum and collect ideas for the provisions they would need as a lighthouse keeper. Look out for displays of food, equipment and clothing which can be drawn on the worksheet provided.

Older groups can collect images which will help them with their lighthouse design task. Look out for ideas about the shapes, materials and techniques used for building lighthouses and the methods of lighting and sound used to warn ships.



These classroom or education-space activities allow students to explore and create their own lighthouse inspired drawings and designs.

The Lighthouse Keepers Basket - younger groups can use their museum research and the story of "The Lighthouse Keeper's Lunch" as a starting point for this activity. They should think about what they would like to arrive in the basket if they were stuck in the lighthouse during a storm and then draw their item on the worksheet. Pupils might want to cut out their picture and pulley it over to the 'real' lighthouse in the education space.

Lighthouse Design Challenge - older groups can use their museum research and work alone, in pairs or in groups to design the best lighthouse. These designs could be taken back to the classroom to build 3D models using cardboard tubes, plastic cups, etc.... and then test each model for strength!



Lighthouses

background info

Lighthouses have been around for hundreds, if not thousands, of years. The first ever lighthouse was built in North Africa and was one of the Seven Wonders of the Ancient World (now that's an impressive lighthouse).

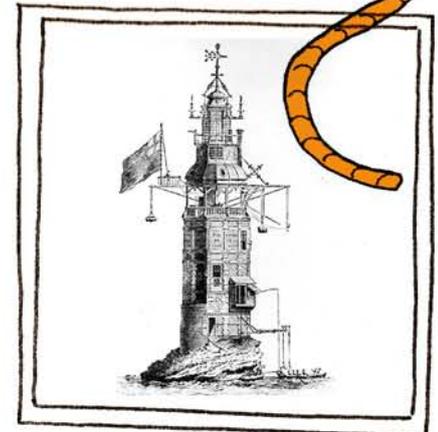
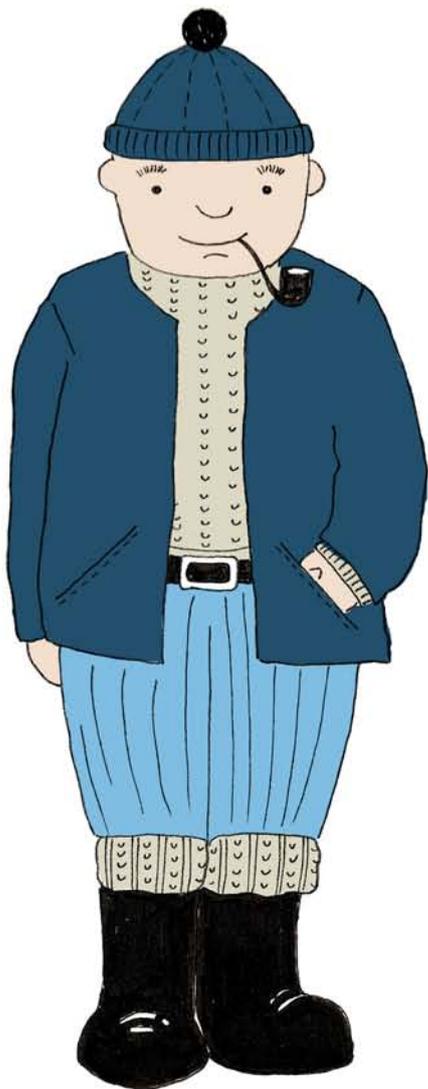
Scotland's first lighthouse was built in 1636 and if you look out the window you might just see where it was built (on The Isle of May). It wasn't a very complicated building just a stone tower with a burning flame at the top to warn all those ships coming up the Firth of Forth towards Edinburgh. But the flame at the top of that tower burned every night for 180 years before a better lighthouse was built. I guess that lighthouse keeper was pretty exhausted!!

It took a while for architects to get the design for lighthouses just right... the first lighthouses were built from wood which didn't last long in stormy seas and when the architect, Henry Winstanley tried to build a wood and stone tower in 1699, a big storm blew the lighthouse away with him inside!!

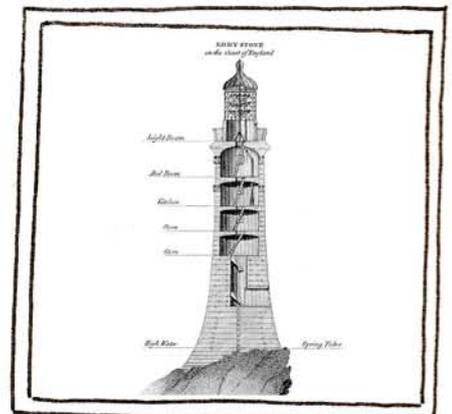
In 1756 a young architect called John Smeaton created a much better lighthouse design. Inspired by the shape a tree trunk he designed a stone and granite lighthouse that was thick at the bottom and grew narrower as it got higher. This was much more sturdy and could take on even the wildest of storms.

Lighthouses don't need keepers like they used to many years ago – most lighthouses now are automated and the last Scottish lighthouse keeper left his job in 1998.

The Northern Lighthouse Board now looks after 209 lighthouses, 162 buoys and 37 beacons that protect ships in the dangerous waters of our seas.



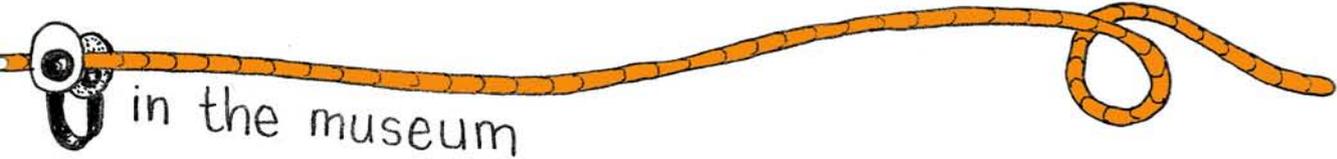
Winstanley's lighthouse, 1699



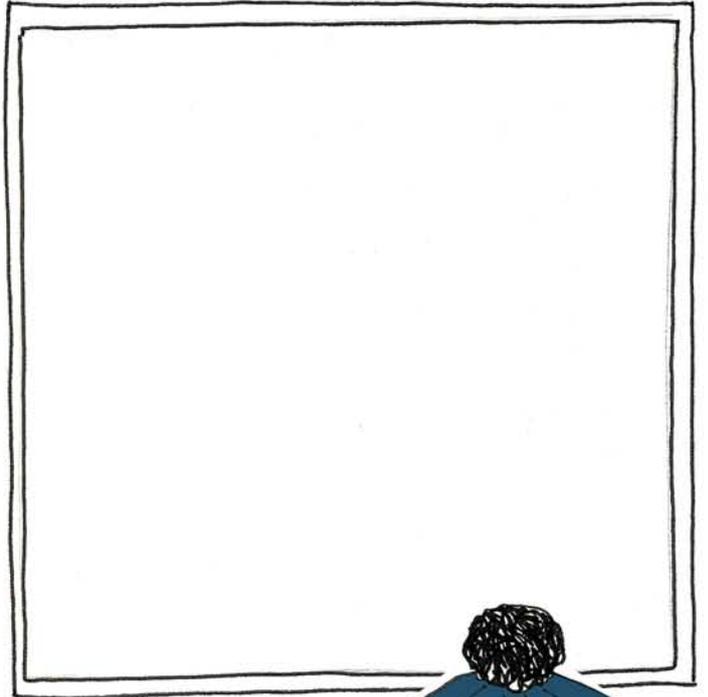
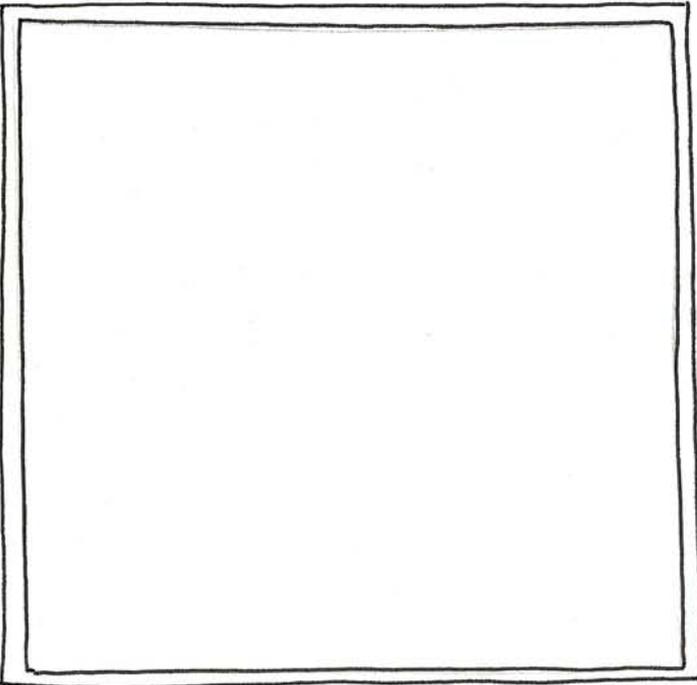
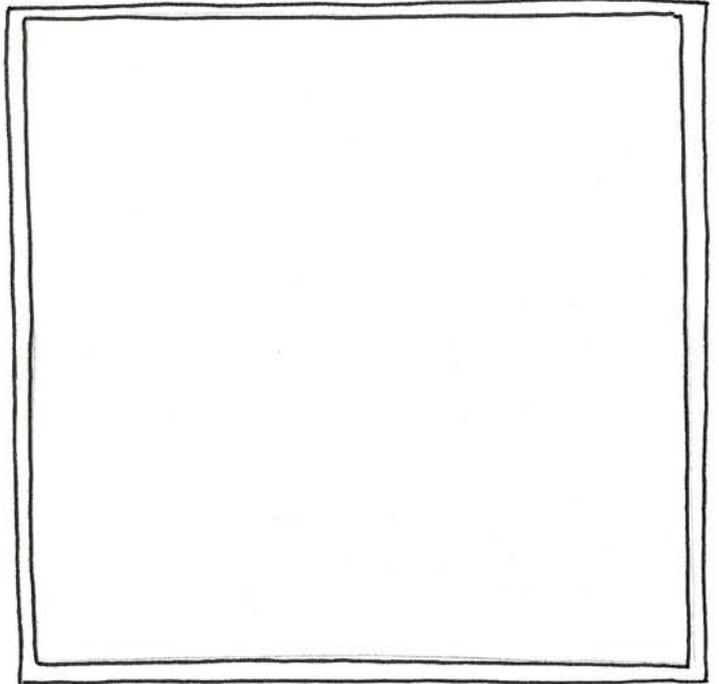
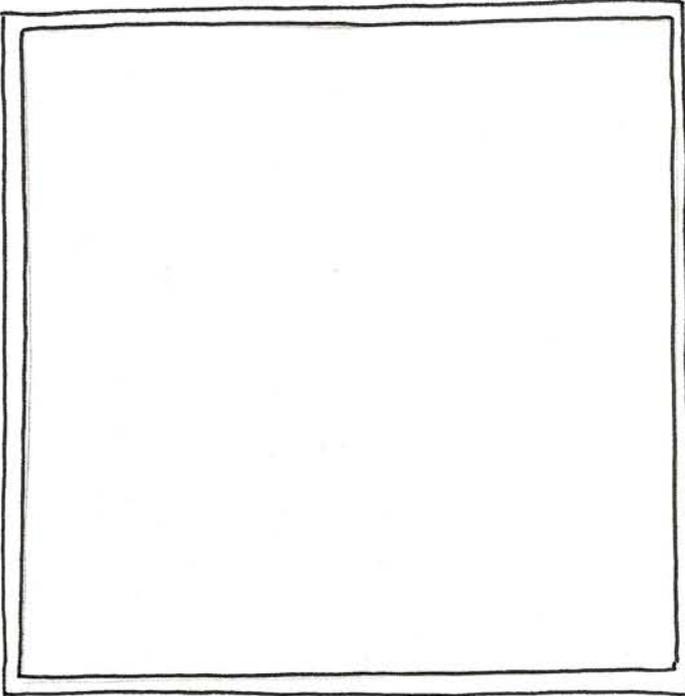
Smeaton's lighthouse, 1756



The 'new' lighthouse on the Isle of May, 1816



in the museum



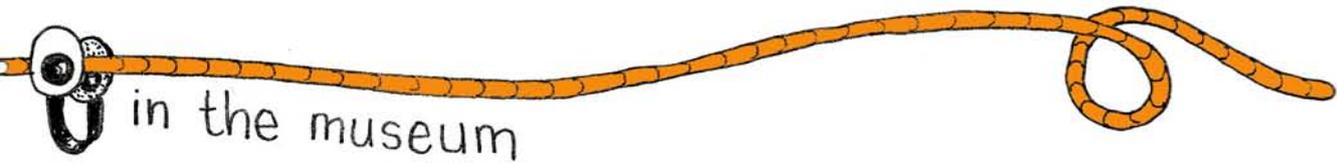
FIND OUT...

...use this sheet to collect ideas for your lighthouse design. Look for interesting shapes, special features and the best building materials.

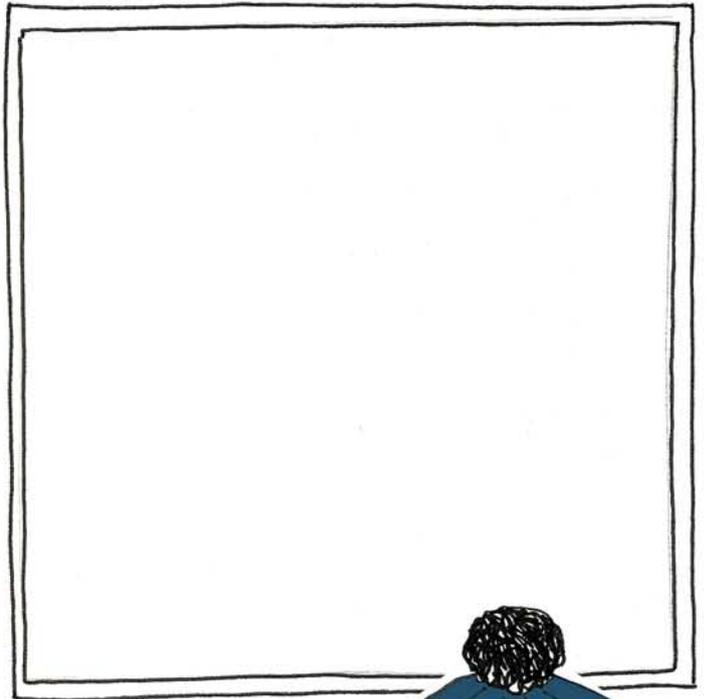
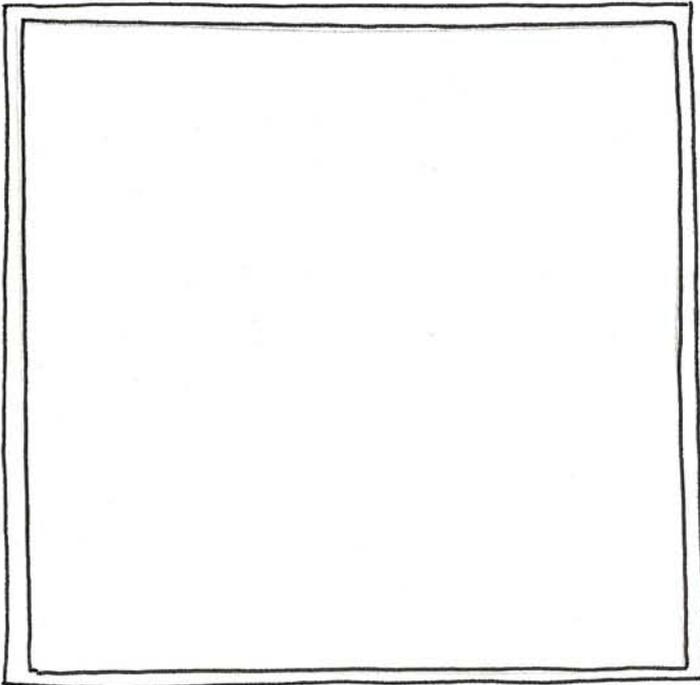
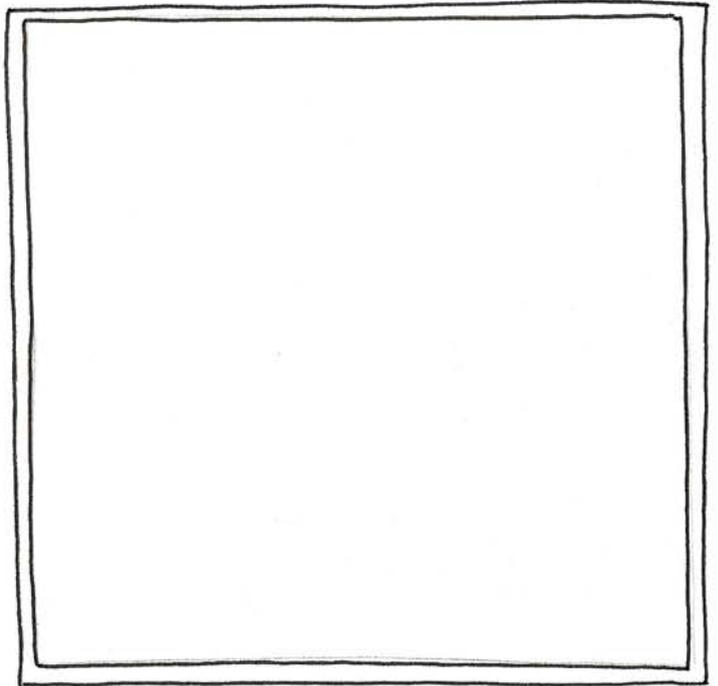
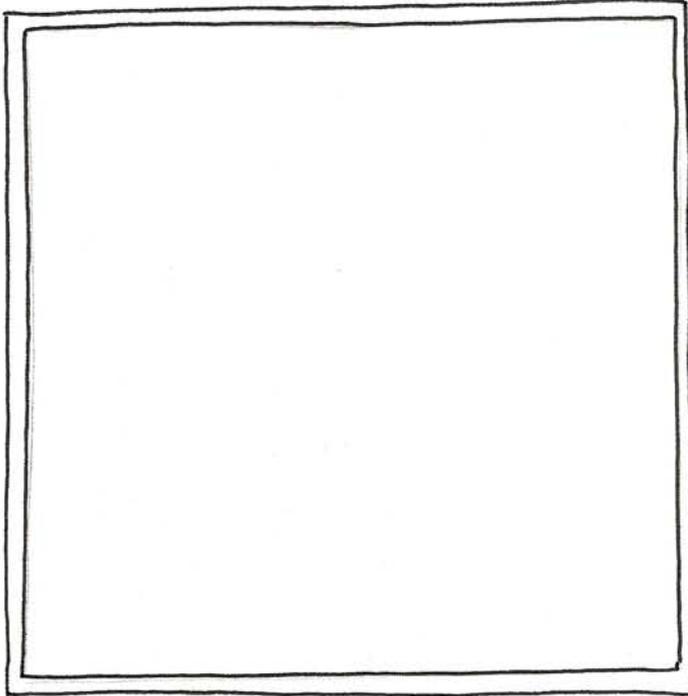


right... lets go
and explore
the museum





in the museum



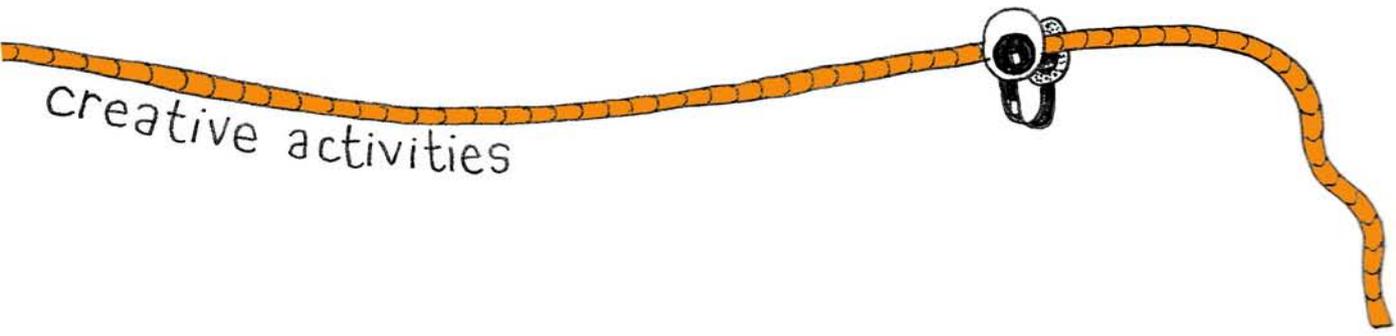
FIND OUT...

...use this sheet to collect drawings of the supplies, equipment or food the lighthouse keeper might need whilst out on the lighthouse.



right... lets go
and explore
the museum





DO...

...Your challenge is to design an award winning lighthouse.

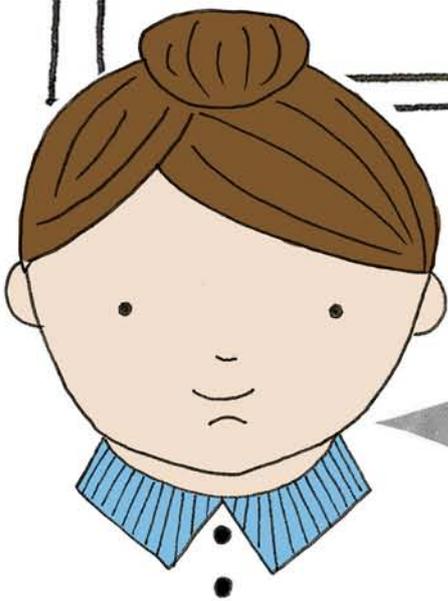
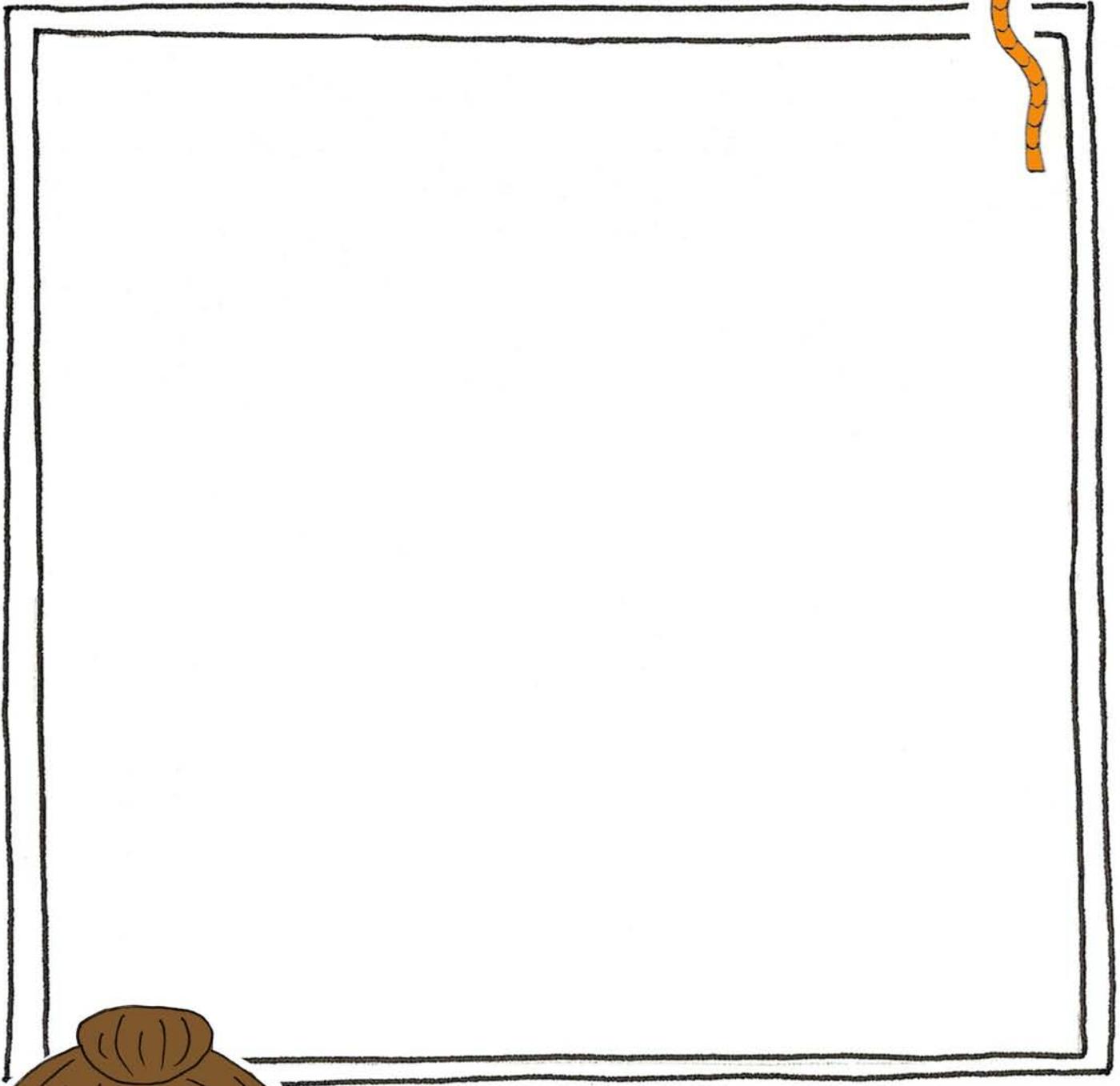
Lighthouses need to be pretty tough to stand those sea storms.

What shape will it be?

How will it produce light?

Will it be strong enough to last for hundreds of years?

creative activities



let's get to work!

DO...

...what would you like to arrive in the lighthouse basket if you were stuck on the Isle of May?

chocolate? your cat?
a television? your mum?