## Learning from Home



## Engineering Challenge

## Build a Model Shaduf

Ancient Egyptian farmers used shadufs to get water from the river to dry land．The bucket was dipped into the river，and the weight on the other end of the＂see－saw＂made it easy to lift the water．

Your Task：Build a model shaduf that is strong enough to lift ten 1p coins or ten marbles／pebbles etc．

You Will Need：a variety of recyclable materials from home
Plan It：First carry out some research on shadufs．Draw a picture of
 what you think your shaduf will look like and write down a list of materials you think you will use．

Build It：Use your plan to build your model shaduf．
Test It：Have a go at using your shaduf－does it work？Can it hold ten lp coins or marbles？

Reflect：Do you think your shaduf works well or could it be stronger？
 Do you think using other materials would be better？

Improve It：Use any ideas from your reflection to improve your shaduf．

Extension：Use your shaduf to lift enough water to fill a glass or jug． You will need to think about whether or not your＇bucket＇is
 waterproof．Also think about the effort you are having to make to lift the water．How many times are you having to dip the bucket？Is it lifting with ease or is it too heavy？Does the load lift smoothly or does it feel unstable？（Wobbly）Etc．

Repeat the steps above to improve your shaduf．

# Maths \& Numeracy Challenge 

This Photo by Unknown Author is licensed under CC BY-SA

## Maths Story

Task: Read the following text then work out the calculations. (You may use a calculator if you wish)

## Ask an adult to help you read the information if you need to.

Ahmose was sitting by the Nile watching the boats sail past. While most boats were small and made of papyrus stalks, some were large, wooden and able to transport heavy goods. He sat, basking in the Egyptian sunshine for four hours. In that time, exactly 37 papyrus boats and 45 wooden boats travelled downriver each hour.
Although he was a farmer, Ahmose had always wanted to own a boat. He would go to Alexandria market and trade his cattle for figs and onions, his favourite food. A large boat could carry 25 cows. He could exchange a full boat of cows for 630 figs or 763 onions.
As the sun set, Ahmose headed back to his home in the centre of Cairo. He walked past his friend Mepsut, who was collecting mud from the banks of the Nile and putting it into large jars. "'Good evening, Mepsut," said Ahmose cheerfully. "'What are you planning to do with all that mud?'"
"'Hello, Ahmose," replied his friend. "I'm going to shape this mud into bricks and build myself and my sister a new house. I've worked out that l'll need 217 bricks for my sister's house and 552 bricks for a house for my family. I'll need a larger house as I have three children.'
Ahmose wondered if he, too, should build a new house but as he had six children, his house would have to be twice the size of Mepsut's. ''That's an awful lot of mud,'" he thought as he carried on walking.

1. a) In total, how many small boats did Ahmose see as he sat by the Nile?
b) How many larger boats did he see?
c) How many boats did he see altogether?
2. If Ahmose decided to trade at the market,

a) how many figs would he get for 4 boatloads of cows?
b) How many onions would he get for 5 boatloads of cows?
c) How many more onions would Ahmose get than figs in exchange for 25 cows?
3. a) If he built a new house for his family, how many bricks would Ahmose need?
b) How many bricks would Mepsut need if he built 4 houses for his sister?
c) If Ahmose builds 3 houses for his family and Mepsut builds 4 houses for his family, how many bricks would they need altogether?




This Photo by Unknown Author is licensed under CC BY-SA-NC

## Howard Carter's Diary

Howard Carter was searching for an undiscovered tomb of a Pharaoh. His work was paid for by Lord Carnarvon, who announced that this was the last year he could afford to support the search. "With trembling hands, I made a tiny breach in the upper left-hand corner... widening the hole a little I inserted the candle and peered in... at first I could see nothing, the hot air escaping from the chamber causing the candle flame to flicker, presently details of the room emerged slowly from the mist, strange animals, statues and gold everywhere the glint of gold"

## Carter's diary:

1st November 1922: I enrolled my workmen and was ready to begin.
4th November 1922: Something out of the ordinary happened. A step cut in the rock had been discovered.
5th November 1922: Step succeeded step, towards sunset there was disclosed the upper part of a doorway.
6th November 1922: Cable to Lord Carnarvon in England: "A magnificent tomb with seal intact!" 23rd November 1922: Lord Carnarvon arrives.
24th November 1922: The whole staircase was clear. We made out the name of Tutankhamun.
25th November 1922: We unblocked the door and found a descending passage filled with stone and pebble.
26th November 1922: The day of days. We came upon a second sealed doorway.
27th November 1922: Careful inspection of the Antechamber and discovery of the Annex.
29th November 1922: Official opening.
3rd December 1922: Tomb sealed against thieves.
25th December 1922: The first objects removed from the tomb.

Task: First, skim and scan for each key word in the passage and highlight it. Next, read the passage twice and colour a smiley face each time you read. An adult may listen to you read and they will colour the larger face. Finally, answer all of the questions. (Write on the back of the sheet)

Key Words: Look these words up if you are unsure of their meaning:
tomb chamber disclosed intact descending

## Retrieval Questions

1. Who funded Howard Carter's expedition?
2. What date was the 'day of days'?
3. What date was the tomb officially opened?

## Inference Questions

4. How do you know that Howard Carter's expedition had gone on for some time (support your answer with evidence from the text)?
5. Why do you think Howard Carter had 'trembling hands'?


Activity and images from TES

## Expressive Arts Challenge

## Nefertiti Pop Art

Andy Warhol is a famous artist who was a leading figure in the visual Pop Art movement. He is famous partly for his print portraits of famous people including Queen Elizabeth II, Marilyn Monroe and Elvis Presley. (See portraits below)


Task 1: Create a picture of Ancient Egyptian Queen Nefertiti in Andy Warhol's Pop Art style.

You can choose whichever media you like, although coloured pencils or felt-tip pens might be easiest to start with. Use bright colours and be creative, the wackier the better! You can draw your own outline of Queen Nefertiti if you like, or you could use the template.

Task 2: Now create some Warhol style art using ICT. Search for a template picture of an Ancient Egyptian Pharoah or Queen online and paste it onto a 'Word'
document. Now use the 'Draw' tab to decorate the template. Make sure to include your name at the bottom right-hand corner of your work.
Save your picture when you have finished. If you have a printer you might want to print it out and put it on display.


Activity and images from TES

