

Gifts for the Gods



Animal mummies revealed

Teacher resource for Key Stage 2
Pack 1: Animals, Gods and Hidden Messages



How you could use these learning activities



This teacher resource about animal mummies is divided into three packs:

Pack 1 – Animals, Gods and Hidden Messages

- What is so special about animal mummies?
- Word bank
- Activities exploring the connections between animals and gods and how animal mummies were used as messengers to the gods
- Links to the National Curriculum

Pack 2 – The History and Science of Animal Mummies

- Activities looking at the people who discovered animal mummies and the scientists who now investigate their contents

Pack 3 – Photos

- High quality photos which support the whole topic of animal mummies

In addition, there is a separate downloadable trail sheet for children to use in the **Gifts for the Gods: Animal Mummies Revealed** exhibition.

Activities are divided into four themes across packs 1 and 2 with photos in pack 3 (outlined on the following page)

Within each theme, the activities show progression through the concepts involved but do not have to be used in this order. We encourage you to 'mix and match' from the activities to suit the aims of your teaching and the abilities of your class.

Activities throughout are marked with one of these three symbols:

Information

Activity can be used in Museum

Activity can be used in school



The Themes

Pack 1: Animals, Gods and Hidden Messages

Animals and gods in ancient Egypt

The ancient Egyptians believed that animals had special powers which they often shared with the gods. They could also act as messengers to the gods and many animals were raised to be mummified.

Messages to the gods

Animal mummies were often used to carry a message to a god; communication which might be hidden in some way and which often involved requesting something from a god or bargaining with them.

Pack 2: The History and Science of Animal Mummies

Exploration, discovery and collection

The stories of both animal mummies and museums themselves are intertwined with the stories of the explorers who discovered items, the people who collected them and the archaeologists and scientists who worked hard to piece together their histories. In many ways, this links with children's own journeys to understand the world around them.

Inside animal mummies

Early archaeologists and scientists could only learn what the insides of animal mummies were like by unwrapping (and effectively destroying) them. Nowadays, scientists use a range of modern techniques to help them learn more without damaging the mummies.

Pack 3: Photos

Many of these activities have practical and creative outcomes that we would love to see. Please share them with us through social media using the hashtag #MyEgyptianWish or via the Manchester Museum Learning Blog:

<https://learningmanchester.wordpress.com>



What is so special about animal mummies?

Introduction

Animal mummies have long been a source of fascination to explorers, archaeologists, historians and scientists. Millions of animal mummies have been found buried in catacombs at sacred sites across Egypt. They were early popular souvenirs that travellers to Egypt brought back to Britain during the 1800s because most were small in size and easy to transport.

Most museums in the UK have at least one animal mummy in their collection, but until recently relatively little research has been done on these mummies. The Ancient Egyptian Animal Bio Bank at the University of Manchester has been involved in ground-breaking research to study these mummies in a non-destructive way using modern technology such as CT scans.



© CSG CIC Glasgow Museums Collection

Why were animals important to the ancient Egyptians?

Animals were very much part of the ancient Egyptian world, with Egyptians believing that they were vital to both their physical and spiritual survival - the first as food, the second as incarnations of the gods or potential messengers to them.

Ancient Egyptians believed one of the questions Anubis would ask

them when they were judged for the afterlife was how well they had treated animals. This shows just how important animals were to them.



Why were animals mummified?

Researchers have discovered various reasons why animals were mummified:

- As beloved pets – despite popular belief, this covers a very small number of animals
- Food for the afterlife – included in tombs to sustain the deceased person's soul
- Religious purposes – there were cults that used animals to communicate with particular gods. Totem animals were chosen to represent the god and were mummified when they died
- Votive offerings – most animal mummies fall into this category. Some Christians light votive candles today, as a symbol of a message to God, while Hindus offer flowers, incense and water to their gods. In a similar way, the ancient Egyptians believed animals could carry messages to the gods. Many animals were farmed just to be killed and mummified. An Egyptian would buy a mummy and put it in the temple of the god that he or she wished to bargain with, thank or please

A range of animals were mummified, including cats, ibises, baboons, crocodiles, fish, mongoose, shrews, dogs, birds, serpents and beetles. Each animal was linked with a

What is so special about animal mummies?

Why have so many animal mummies been found?

The demand for such votive animal mummies became so high that it became an industry in itself. Sometimes the care taken over the mummification of animals for votive offerings was not as good as it might have been.

Researchers have discovered that some mummies contain only fragments of animals or even feathers, reeds, eggshell or pieces of pottery. It is unclear whether this was a method of 'doing it on the cheap' or whether Egyptians believed that the inclusion of even part of an animal was enough to make the mummy sacred.

Researchers also believe that some landscapes were considered sacred. Anything that lived or died in them was also sacred by association and was therefore worthy of mummification.



How have scientists learnt about what is inside animal mummies?

In earlier times, archaeologists and scientists discovered the contents of animal mummies by unwrapping them, but this meant destroying the mummies. Nowadays, scientists prefer to use non-invasive techniques which keep the mummy intact.

Researchers have made huge progress in discovering the secrets of animal mummies by using X-rays, CT and even more accurate micro-CT scans. Some of these scans enable researchers to 3D print the contents of a mummy and help them to examine them more closely.



Exhibition and conclusion

The **Gifts for the Gods: Animal Mummies Revealed** exhibition at Manchester Museum, World Museum Liverpool and the Kelvingrove Art Gallery and Museum explores some of the history and science of animal mummies. Much has been discovered, but with such a huge number of animal mummies still in existence, there are still many things to learn about them.



Word Bank

People

afterlife

The ancient Egyptians believed that when a person died they would be judged on how well they had lived before they went on a journey to another stage of life. This was called the afterlife.

artefacts

Artefacts are ancient objects. They have often been found by archaeologists during excavations.

catacombs

Catacombs are underground cemeteries. They often consist of tunnels and rooms with spaces dug out for individual mummies.

excavation

An excavation is a particular area where archaeologists have dug into the ground to find clues to how people lived in the past.

souvenirs

Early explorers of other countries like Egypt brought home items to help them remember what they had seen.

votive offering

A votive offering is an object which is left in a sacred or special place for religious reasons, often to send a message to a deity or as an offering when bargaining with them.

Ancient Egypt

archaeologist

An archaeologist is a person who tries to understand the past by digging in the ground to discover objects or parts of objects which people left behind.

By carefully recording where and how deep these objects were found, archaeologists can often work out how different items were used.

Egyptologist

An Egyptologist is a person who studies ancient Egypt through examining artefacts, old writing and other clues from the past.

explorer

An explorer is a person who travels to different parts of the world to learn more about what places are like and how people live there now or how they lived in the past.

historian

A historian is a person who tries to learn more about how people lived in the past, including what they ate, what they wore, what they wrote and what they did for work and entertainment.

scientist

A scientist is a person who tries to understand more about the world by using experiments to test theories and new technology to learn more about things.



Word Bank

Animal mummies and science

3D printing

CT scans are good enough that 3D prints of the inside of an animal mummy can be made, meaning scientists can handle copies of the inside of a mummy without unwrapping it.

CT scans

CT (computed tomography) scans are X-ray 'slices' taken from many different angles around an object and often put together in a 3D model by computer.

Micro CT scans

Micro CT scans are like CT scans but the pixel sizes are a lot smaller and there are more of them, giving a much more detailed picture – think of the difference between what ordinary TV and HD TV programmes look like.

Non-invasive

Non-invasive exploration of animal mummies is any way that scientists use to find out what is inside a mummy without actually unwrapping it.

Skeletal remains

Skeletal remains are often found in animal mummies. They are the bones from an animal (the whole or part of its skeleton).

X-rays

X-rays are a type of radiation which pass through soft materials and bounce back off of harder ones (e.g. bones). The picture, a bit like a photo, shows the hard bits of the inside of something.



Animals and gods in ancient Egypt

The ancient Egyptians believed that animals had special powers which were often also used by the gods. They could also act as messengers to the gods and many animals were raised to be mummified.

Activities in this theme:

Which animals were made into mummies to take messages to these gods?

Pupil sheet linking animals to the gods they often represented. Teachers choice as to whether to use as a museum or classroom activity.



Animal roles

Teacher-led activity exploring modern uses for animals (pets/food/work) and introducing the idea that the ancient Egyptians saw them in additional roles.



Animal farming

Teacher-led activity exploring where animal-related foodstuffs come from and issues around how they are farmed, comparing modern and ancient Egyptian approaches.



Remember to print and bring resources if you want to do these activities at the Museum.

Which animals were made into mummies to take messages to these gods?

Beware: some of the gods had more than one animal linked with them!
Draw the answers in the empty boxes.

Thoth - The god of wisdom and writing



Mongoose

Ra - The god of the sun



Lioness

Sekhmet - The goddess of war



Ibis

Horus - The god of the pharaohs



Dung beetle

Baboon

Falcon



Animal Roles

What do we use animals for nowadays? What did the ancient Egyptians use them for?

Pairs or groups discuss and write down: what animals can they think of?

Which of these animals is important? Why?

Feedback and ask class to decide which of these sentences they think fit the animals:

- This animal is a pet.
- This animal is used for food.
- This animal works.

If possible, show children short YouTube videos of animals being farmed (e.g <https://www.youtube.com/watch?v=fOISJWeV1Tg#t=11>) or working.

Further discussion: what makes these animals suited to their roles?

Show picture of recognisable animal mummy from picture pack. Why could the ancient Egyptians have thought this animal was important? Would it be a pet, food or a worker?

Introduce the idea of animal mummies as (mostly) being messengers to the gods.

Differentiation / extension

If you feel it is appropriate for your children, you could refer to the discussion activity in **Animal Farming**.

Animal Farming

Why are animals farmed?

Ask children if they have ever been to a farm. What sorts of animals have they seen there?

List foodstuffs such as these on the board. Taking into account children's backgrounds, you may need to omit some. Ask the children where they come from:

- Pork
- Lamb
- Beef
- Mutton
- Ham
- Milk
- Eggs
- Sausages

Explain that farmers work very hard to provide these food items by looking after their animals, but supermarkets and consumers want them as cheap as possible, so there is a difficult balance between creating affordable food and providing the best conditions for the animals.

Ask how many of the children have a bedroom of their own. Now ask them to imagine sharing their room with ten other people and never being able to leave the room. How would they feel?

Show included photos of free-range hens and those raised in barns.

Small group discussion: producing eggs is cheaper if hens are kept in closer conditions: which is more important, cheap food or animals' welfare? Why?

In feedback, emphasise, that there are no easy answers.

The Ancient Egyptians needed so many animals for animal mummies that they farmed large numbers of different types of animals.

Differentiation / extension

At the point of discussion about being squashed in a bedroom, children could be encouraged to draw or write how this feels.

Divide the class into groups. Give each group a 'position card' (reproduced below). Ask them to produce a presentation on their position for the rest of the class.

Once the groups have all presented, discuss with the class which of the viewpoints are most compelling. How do our views of animals compare with those in ancient Egypt?

Animal Farming



Animal Farming

Position Statements

Animals have rights. The most important thing for animals is that they are looked after and kept in the best possible conditions.

People are short of money so need to have affordable food to eat. Sometimes this means animals don't have quite as good a life as we might like them to.

Farmers need to be able to make a living. Sometimes that means they have to keep a lot of animals. It's sometimes difficult to look after so many animals as well as they might like.

We need to supply other ancient Egyptians with animal mummies and they always want more! How can we help people to pray to their gods if we can't farm lots of animals?

When we ancient Egyptians die, we will be judged by our gods about how well we've looked after animals.



Messages to the gods

Animal mummies were often used to carry a message to a god, communication which might be hidden in some way and which often involved requesting something from a god or bargaining with them. Specific hieroglyphic activities are not included in this section for two reasons:

- Hieroglyphs are complex to translate – they do not act as a simple letter or word substitution
- A tiny fraction of ancient Egyptians (around 1%) could actually read, write or understand them

The activities in this section have been designed around the idea that messages within animal mummies are a hidden communication between the person and the god and that they often involved some sort of bargaining

Sending someone else to deliver a message

Teacher-led activity exploring different ways messages can be conveyed. Teachers choice as to whether to use as a museum or classroom activity.



Hiding secret messages

Several teacher-led activities exploring creating secret messages with different materials.



Code wheels

Pupil sheet encouraging them to create and decode secret messages, as an analogy for those found in animal mummies.



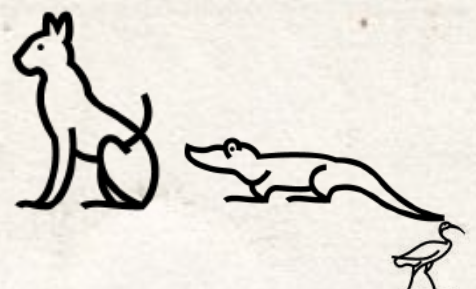
Make your own votive offering

Pupil sheet exploring the connection between hidden messages, the gods and the animal which represents them.



Bargaining language

Teacher-led activity (with accompanying pupil sheets) exploring the sort of language used when bargaining to get something you really want.



Sending someone else to deliver a message for you

How easy is it to get a message through to someone else?

Start with a game of Chinese Whispers. Divide the class into four groups, put each group in a line. Give the starting person a fact about the Egyptian gods, such as:

"Thoth was the Egyptian god of wisdom."

"Sekhmet was the Egyptian goddess of war."

"Atum was the Egyptian creator of the world."

"Horus was the Egyptian god of the sky."

The messages are likely to get pretty garbled!

Repeat the process with just three children. How much more of the message gets through?

You could use:

"Ra was the god of the sun."

Finally, spread the same three children further apart.

Give the first child a written message, such as:

"Anubis was the Egyptian god of the afterlife."

Ask the first child to read it and then fold it and pass it to the second child. The second child takes it to the third child who reads it out. Ask the first child to agree if the message is accurate.

Discussion: what are the two big changes this time (writing it down, having a messenger). How did they make a difference?

Note that the second child, as messenger, had to travel.

Introduce the idea that in ancient Egypt, animal mummies were used to carry messages to the gods.

Differentiation / extension

During the Chinese Whispers part of the activity:

- With younger or lower ability children, just use the name of the god
- With older or higher ability children, use the longer versions provided on the cards on the next page

Sending someone else to deliver a message for you

Chinese whispers

Thoth was the Egyptian god of wisdom. His animal was the ibis or the baboon.

Sekhmet was the Egyptian goddess of war. Her animal was the lioness.

Atum was the Egyptian creator of the world. His animals were the snake, lion and bull.

Horus was the Egyptian god of the sky. His animal was the falcon.

Ra was the god of the sun. His animals were the ram and the cobra.

Anubis was the Egyptian god the afterlife. His animal was the dog.



Hiding secret messages

How can we write hidden messages?

Materials:

For this activity, you could use lemon juice or milk as invisible ink. When the 'ink' is dry, you can heat the paper gently (e.g. over a radiator). The juice/milk will heat up at a different rate to the paper and then become visible

Alternatives are:

- A white crayon or candle on white paper (then paint over with watercolour paint to expose a negative image of the message)
- A mixture of baking soda and water (roughly 50/50). When the ink dries, painting over with a dark juice will expose it

Discuss with the class why some messages are secret.

Sometimes we need to find out what hidden messages say (children may be aware of the work done by Alan Turing and his team at Bletchley Park during World War 2).

Sometimes messages were not meant to be really hidden, but also weren't meant to be seen by everyone. An example of this is the messages sent to gods with animal mummies.

Encourage children to try writing a hidden message to another classmate, who can then 'discover' it.

Please share examples of the secret messages with us on social media (#myegyptianwish).

Differentiation / extension

Invisible ink could be used within the **Bargaining Language** and **Make Your Own Votive Offering** activities in this section.

Hiding secret messages

Code wheels

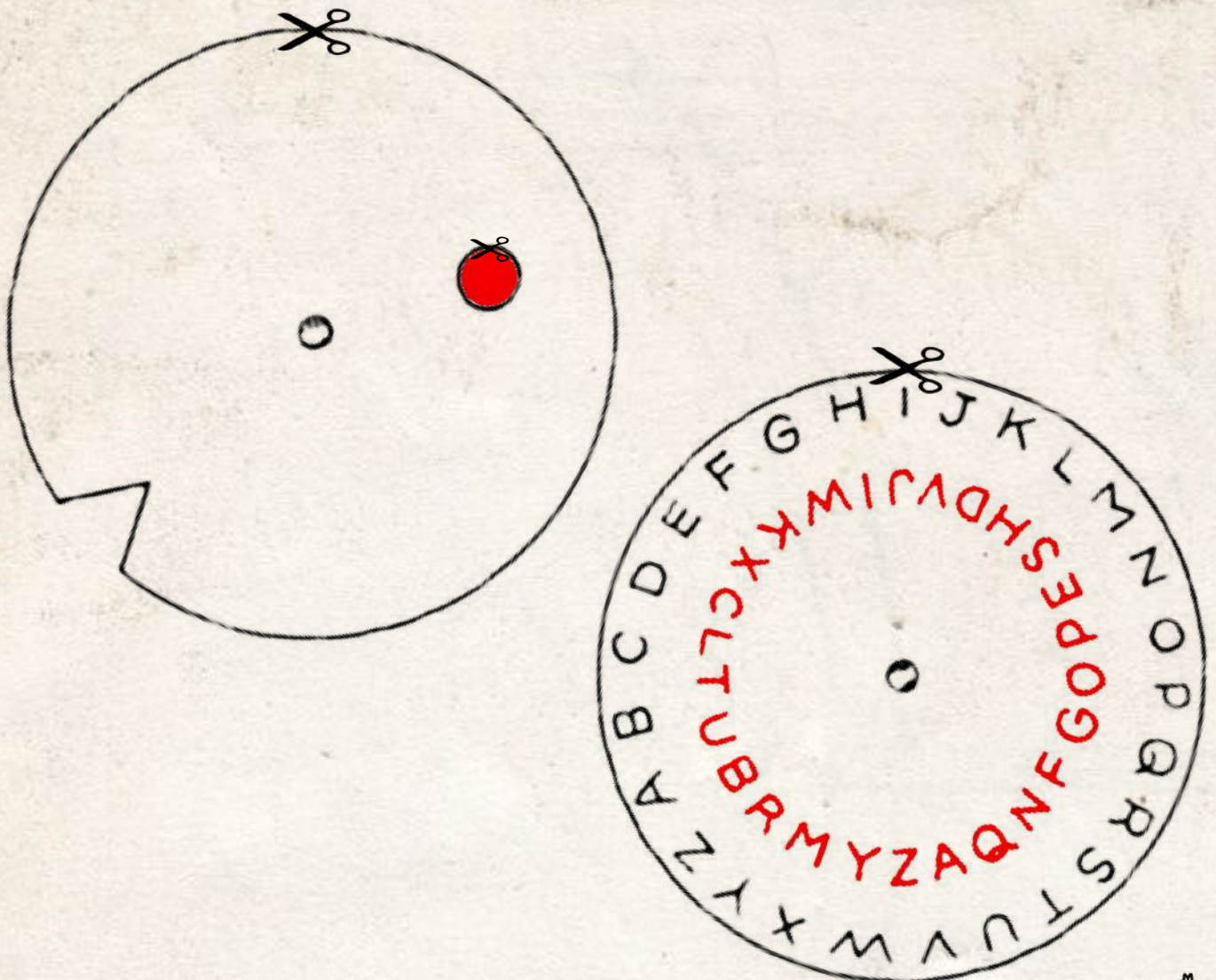
Cut out the two discs. Carefully cut out the small red circle on the plain disc.

Put the plain disc on top of the other one. Push a split pin through the middle to join them together.

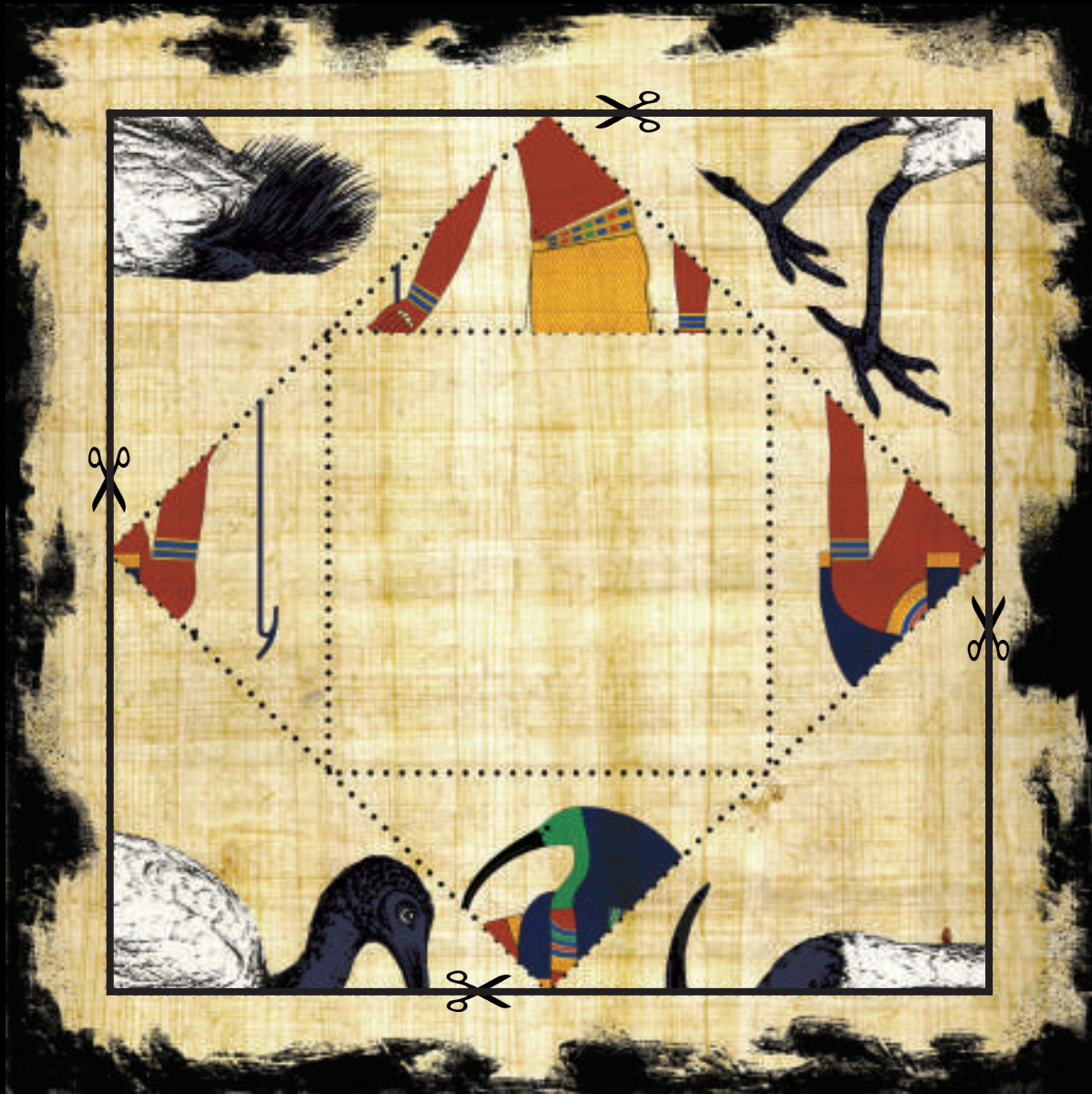
Write down your message to the Egyptian gods.

Turn the back disc until the next letter of your message appears in the triangle. Change it into the red letter in the small circle.

See if an adult or someone else in your class can work out your message!



Make your own votive offering



Ever begged your parents for something you really, really want? If the ancient Egyptians wanted to ask their gods for something, they would make a votive offering—often a mummy made from an animal.

1. Cut out the square.

2. Turn over to the blank side and write or draw what you want.

3. Turn back over so you can see the pictures. Fold along the four long dotted lines, so the corners go into the middle.

4. What animal will be the mummy for your offering?

5. Make sure you can still see the animal. Now fold along the four short dotted lines, so the corners go into the middle.

6. Which god will accept your offering?

Sadly, we can't promise that your Egyptian god will answer your prayer!

Bargaining Language

What sorts of messages did the ancient Egyptians send with their animal mummies?

Paired discussion: what do you really, really want that you don't have? Perhaps something that your parents haven't let you have.

Feedback to class.

Show (from next page) or read out the two examples of bargaining – emphasise that these are from actual votive offerings.

'May Osiris give life to Djed-bastet-iu-ef-ankh, son of Padi-khonsu, his mother is Hery-bastet.'

'Thoth, the great god, give life to _____ on her birthday, she who gave this object of bronze before Thoth the great god and Osiris'

What are the people asking for? What sort of language are they using?

Show (from next page) or read out these two examples of incomplete bargains:

"If you let me have..., I will..."

"If you let ... happen, I will..."

Paired discussion: what might they want? What would be acceptable bargains to offer?

Feedback to whole class, sorting responses into 'acceptable' 'a step too far'.

Differentiation / extension

In the sorting responses part of this activity, 'borderline' could be added as a category for upper KS2.

These bargaining statements could be added into the Make Your Own Votive Offering sheet.

Children could also fill in the Bargaining and balancing pupil sheet.

Remember to print
and bring resources
if you want to do
these activities at
the Museum.

Bargaining Language

May Osiris give life to
Djed-bastet-iu-ef-ankh, son
of Padi-khonsu, his mother
is Hery-bastet.

Thoth, the great god, give life
to _____ on her birthday,
she who gave this object of
bronze before Thoth the great
god and Osiris.

"If you let me have _____,
I will _____"

"If you let _____ happen,
I will _____"



Bargaining and balancing

The ancient Egyptians liked balances. Anubis, the god of the dead and mummification, weighed each dead person's heart to see if their good side was better than their bad side.

What do you think would balance these scales:

I will



I want to stay up late to watch my favourite programme.

I will vacuum all the floors at home.



I want

I will



I want to have my friends to stay for a sleepover.

I will do all the washing up for a week



I want

Links to the National Curriculum

Activities included in the **Gifts for the Gods: Animal Mummies Revealed** teacher resource pack may support teaching and learning for the following statutory requirements.

History

Pupils should be taught about:

- the achievements of the earliest civilizations - an overview of where and when the first civilizations appeared and a depth study of one of the following: Ancient Sumer; The Indus Valley; Ancient Egypt; The Shang Dynasty of Ancient China

English

Spoken language

Pupils should be taught to:

- listen and respond appropriately to adults and their peers
- ask relevant questions to extend their understanding and knowledge
- use relevant strategies to build their vocabulary
- articulate and justify answers, arguments and opinions
- give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings
- maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments
- use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas
- participate in discussions, presentations, performances, role play, improvisations and debates

Written language

Pupils should be taught to:

Years 3 and 4

Draft and write by:

- composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures
- in non-narrative material, using simple organisational devices [for example, headings and sub-headings]

Years 5 and 6

Draft and write by:

- selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
- using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]



Links to the National Curriculum

Science

Working scientifically

Pupils should be taught to use the following practical scientific methods:

Years 3 and 4

- asking relevant questions and using different types of scientific enquiries to answer them, including oral and written explanations, displays or presentations of results and conclusions
- identifying differences, similarities or changes related to simple scientific ideas and processes
- using straightforward scientific evidence to answer questions or to support their findings

Years 5 and 6

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments

Pupils should be taught to:

Animals including humans

Year 3

- identify that humans and some other animals have skeletons and muscles for support, protection and movement

Living things and their habitats

Year 4

- recognise that environments can change and that this can sometimes pose dangers to living things

Year 5

- describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird

Year 6

- describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals

Gifts for the Gods school resource pack evaluation

How did you use this resource?

--

Which activities were most helpful in introducing the topic of anima mummies to pupils?

Activity	How it supported introducing the topic

Which activity was most helpful in developing skills in these areas?

	Activity	How it helped develop skills in this area
History		
English		
Science		

Any other comments about this resource:

--

It really helps to have feedback about this resource.
Either copy this, complete and email to School.bookings@manchester.ac.uk or
print it and post to Primary Learning Co-ordinator, Manchester Museum,
The University of Manchester, Oxford Road, Manchester, M13 9PL

