KS1, KS2

Castles

TEACHING PACK

- 35 teaching ideas and accompanying resources, including some for display
- Cross-curricular links to history, geography, science, DT and English
- Display ideas

teachit

Contents

Finding your way around the project pack

This project pack is a cross-curricular collection of creative teaching ideas and resources around the theme of *Castles*. Our aim is to bring together different resources from Teachit Primary into a cohesive whole, giving more support and structure than we can offer with stand-alone resources. The pack contains teaching activities linked to History, Science, Design, Geography and Literacy. Where appropriate, each subject has links to the new 2014 curriculum.

The pack lends itself to being used in different ways. It could form the basis of a whole week's project, or you could dip in and out of it over the course of a term, or even the whole school year.

The project is broken down into individual subject areas. Each section of the pack includes a set of teaching ideas, followed by accompanying resources. Wherever a teaching idea has a supporting resource we've indicated this and explained how the resource is relevant: for example, as a means to acquire background knowledge for the activity, to facilitate the recording or presentation of the activity or as an extension task related to the activity.

The ideas and activities in this pack are open and therefore accessible to a wide age range. The resources are all available in adaptable formats, making it easy to differentiate the tasks by ability.

We've included links to each separate resource included in this pack so that you can access the resources directly on www.teachitprimary.co.uk. We've also included the file number for each original resource – just pop this into Teachit Primary's search engine. Most of the resources in this pack are Word documents, but we've also included links to PowerPoints. Please log in first in order to access any of these resources on Teachit Primary.

We hope you enjoy using this pack. If you have any questions, please get in touch: email support@teachit.co.uk or call us on 01225 788851. Alternatively, you might like to give some feedback for other Teachit Primary members – you can do this by adding a comment on the Castles Project Pack page on Teachit Primary (please log in to access this!).

Science and DT

Building castles and testing weapons

An opportunity to play with bows and arrows is sure to grab the attention of your class and sneaking in some key principles of scientific testing along the way ensures that learning objectives are met. Plus getting out the building blocks for some castle construction will not seem like work at all!

2014 curriculum links:

Science aims met within this project pack

- Develop **scientific knowledge and conceptual understanding** through the specific disciplines of biology, chemistry and physics.

- Develop understanding of the **nature, processes and methods of science** through different types of science enquiries that help them to answer scientific questions about the world around them..

Science KS1 subject content covered within this pack

Working scientifically:

- asking simple questions and recognising that they can be answered in different ways

- observing closely, using simple equipment

- performing simple tests

- using observations and ideas to suggest answers to questions

- gathering and recording data to help in answering questions.

Science KS2 subject content covered within this pack

Working scientifically:

- setting up simple practical enquiries, comparative and fair tests

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment

- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions

- using straightforward scientific evidence to answer questions or to support their findings

Forces:

- identify the effects of air resistance, water resistance and friction, that act between moving surfaces

Teaching ideas

- Castles began as simple wooden constructions but soon developed into the stone structures we still see evidence of today. It is those structures that we think of when we picture a castle. Use simple building blocks and explore how 3d shapes can be used to create a classic castle construction. Create nets for the shapes used or use packaging to build a model of a castle. Refer back to these as children discover more details about how castles were constructed.

- Use a shoe box as a starting point for constructing a model to show the internal layout of a simple stone keep. Use cardboard to create three floors and add either trap doors and ladders or cardboard tubes for spiral staircases to link the floors. Add details such as arrow slits or windows by either drawing them on or using a craft knife to cut out. The lower floor would have been used as storage so add simple bags made from cloth and modelling clay to create barrels and jars. A simple fireplace can be constructed for the kitchen using a cardboard tube as the flue. The upper floor was used as living quarters so add junk models for simple beds and storage boxes. Resource 21787: 'Building a Norman castle' provides detailed instructions for building the model.

- Archery was a highly regarded skill in medieval times. Test your class's skills with an archery tournament using toy bows and arrows. Ask the children to consider how much they pull back on the bow and how the angle at which they hold the bow affects the accuracy of the flight of the arrow. A simplified version is to use bean bags and hoops as a test of accuracy. Resource 21157: 'Archery investigation' provides a frame for children to record ideas and findings.

- Knights needed protection against the archers' arrows so armour was vital, but moving around encased in armour is no easy task! Use stiff sheets of cardboard and large plastic drainpipes to 'dress' up a willing knight. Challenge them to carry out simple tasks, such as walking, to see just how difficult it was. To add a greater degree of movement the armour was divided into separate pieces which left areas of the body exposed; these were then covered with chainmail. Use lengths of thin wire to create samples of chainmail with rings of about 1.5cm in diameter – each one needs to be a perfect circle! Children will also enjoy the task from resource 21149: 'Designing a shield for a knight'.

- Modelling toys such as Lego, Kinex, Meccano or a combination of all three can be used to create the hugely effective medieval weapon, the trebuchet. Once constructed, ask the children to explore the effects that using different amounts of counter weights has on the distance a missile/rock/marble will travel. Discuss where the force of gravity is working on the trebuchet. Resource 21155: 'Trebuchet investigation' supports the teaching of this activity.

- Ready steady cook! Hold a medieval themed banquet, great for an end of project celebration. Be sure to observe the correct table etiquette such as: no spitting, no

dipping meat in the salt dish, no picking of teeth – these could make for some interesting signs around your banqueting hall. Children could also make and decorate their own petal bread for the occasion. Resource 20861: 'Medieval recipes' tells you how!

- It's always useful to provide children with opportunities to review their work. Resource 14060: 'Time to evaluate' is a useful self-assessment tool for children's design work.

Resources contained within the Science and DT section of this project pack
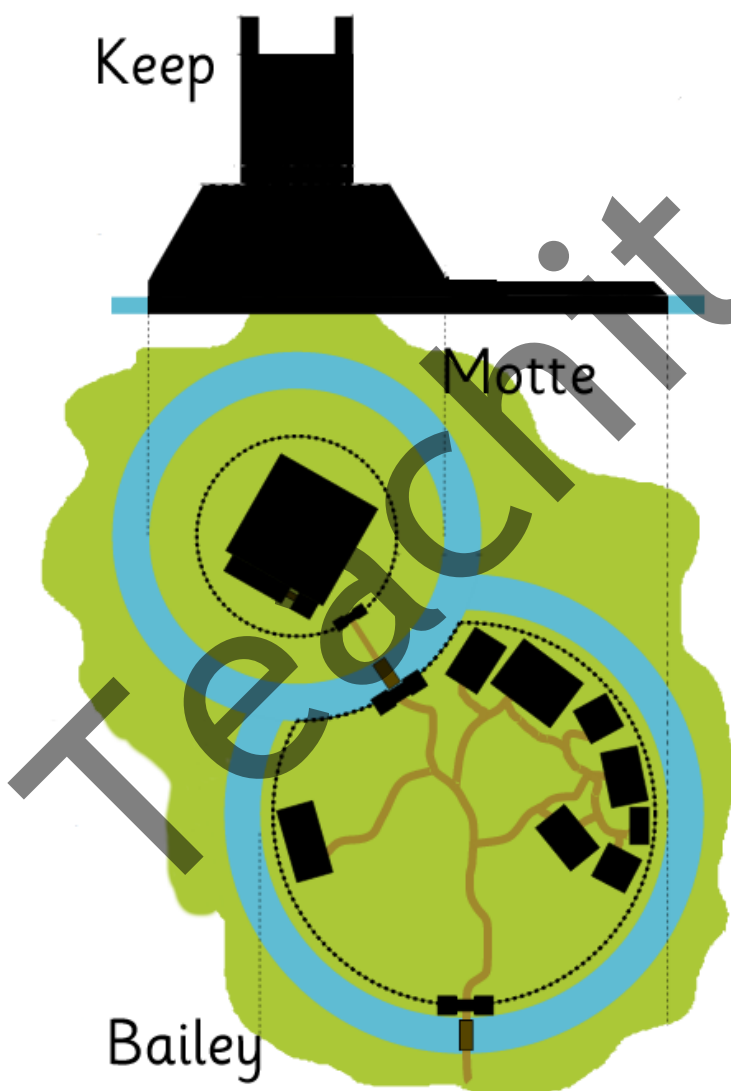
How to build your motte

What you need:

- ✓ large sheet of cardboard
- ✓ small cardboard box
- ✓ newspaper
- ✓ masking tape
- ✓ tissue paper
- ✓ glue
- ✓ green paint
- ✓ straw (optional)

Fact file:

The motte is a large earth mound with steep sides and a flat top. Mottes can be man-made or a natural mound. Sometimes mottes were created by building over older structures. The motte could vary in size from 3 metres to 30 metres high and 30 metres to 90 metres in diameter. A motte was protected by a ditch around it which was often where the earth that built it came from! The ditch could be filled with water or spikes for defence.

Keep

Motte

Bailey

1. Choose a large piece of stiff cardboard to use as a platform to build on.

2. Draw out a figure of eight onto the cardboard to create the baseline shape for your motte and bailey.

3. Glue a small box to form a platform for your motte onto the card.

4. Scrunch up pieces of newspaper and tape to the box to create a mound. Use masking tape as this is easier to paint over. Make sure your mound is wider at the bottom and narrower at the top.

5. Create a smooth finish to your mound by covering in layers of papier-mâché made from glued layers of tissue paper.

6. Paint your mound green, for grass! Glue on some straw to add texture before painting for added effect. Paint the bailey outline at this point too.

How to build your keep

What you need:

- ✓ small cardboard box (to fit on top of your motte)
- ✓ cardboard strips
- ✓ grey and brown paint
- ✓ grey and brown felt-tip pens
- ✓ glue

Fact file:

A keep with a protective wall was built on top of the motte. The keep is a strong defensive building. Older keeps were made of wood and then later replaced with stone. Some keeps were simple towers with room for just a few soldiers whilst larger keeps were much grander with cellars, kitchens and living and sleeping quarters.

1. Use a small box, which will fit on top of your motte, or create your own using a simple cuboid net.
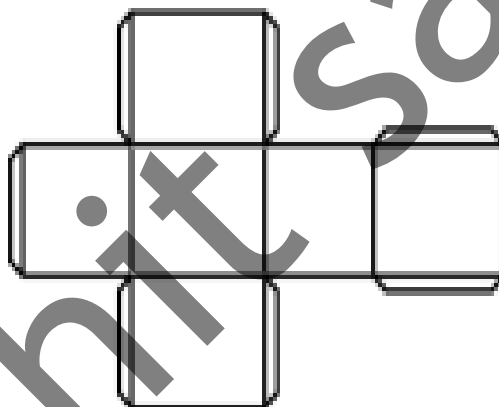
2. Cut some crenellations out of a long strip of card (remember they must be long enough to go around all four sides of your box) and attach to your box with glue.

3. Paint the box grey and, when dry, add some stone work details with felt pen. Add other details including arrow loops and an arched doorway.

4. Attach your keep to the top of your motte with glue.

5. Add a defensive wall around the top of your motte using a long strip of card, painted to look like wooden planks.

How to build your bailey

What you need:

- ✓ selection of small cardboard boxes
- ✓ white paint
- ✓ brown and black felt-tip pens
- ✓ yellow card
- ✓ brown card
- ✓ 'Lego' figures (optional)

Fact file:

The bailey was an enclosed castle compound, like a small village. It was overlooked by the motte and surrounded by a wooden fence called a palisade ditch. The bailey would contain a wide range of buildings, including a hall, kitchens, a chapel, barracks, stores, stables, forges and workshops. The bailey was linked to the motte either by a bridge stretching between the two or by steps cut into the motte.

1. Paint your boxes white. When dry add details such as 'wattle and daub' windows and doors using felt-tip pens.

2. Create simple roofs for each building by folding the yellow card, fringing the edges and attaching to each box with glue. Adding 'Lego' animals and people can also be effective.

3. Link the keep and bailey either by painting a walkway down the surface of the motte or by adding a ramp made from card and gluing down the side of the motte.

4. Add a palisade to the bailey by adding a long strip of card, painted to look like wood, around the edge of the bailey. Tip: cut several small and equally spaced slits into the card and fold to create a ridge which can be glued to the flat surface of the bailey.

5. Paint a moat around your motte and bailey as a finishing touch.
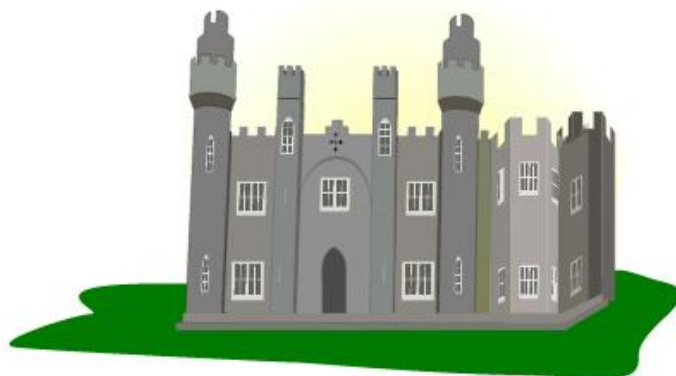
An expert archer could fire 12 arrows in one minute! Just try miming that, it's really difficult. The further you could fire an arrow was also important, the further away you were from the enemy the safer it was for you!

You will carry out an investigation to explore the link between how far the bow is pulled back to how far the arrow travels.

You will need:	Setting up the test
wooden bow wooden arrows tape measure	You will need a large testing area, school hall or play ground Wooden arrows will need to be marked at five centimetre intervals (this is important to see how far to pull back your bow) **Safety first:** make sure everyone stands behind the archers when firing.

Key questions:

What effect do you think the distance the bow is pulled back will have on the distance the arrow travels?
How will you ensure the test is fair?
What will you keep the same and what will you change?
What effect will repeated testing have on the 'quality' of your results?

Recording results:

Distance bow pulled back (cm)	Distance arrow travelled (cm)

What do your results show about the link between the distance a bow is pulled back and the distance the arrow travelled?

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Were there any issues with your testing that may impact on the accuracy of your results?

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> Plan an investigation that looks at the angle at which an arrow is fired and the distance it travels.
> Consider what you will keep the same and how you will carry out the investigation fairly.

What impact do you think the firing angle will have on the distance travelled?

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Heraldry was devised so that knights could be identified on the battlefield, after all you don't want to attack the wrong person! The shield was an important part of a knight's armour but it also made up a key part of his heraldic design. Take a look at the basic shield designs below and select one for your own design.
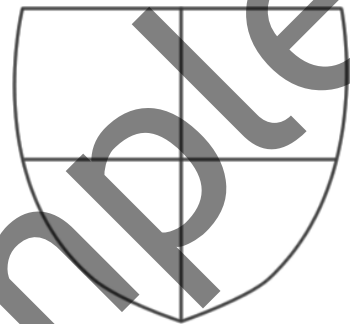
Colours also played an important part but were limited to silver, gold, red, blue, green, purple and black. Experiment with using different colour combinations on the shield outlines below.
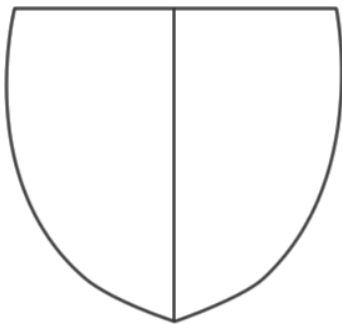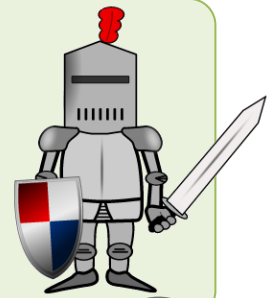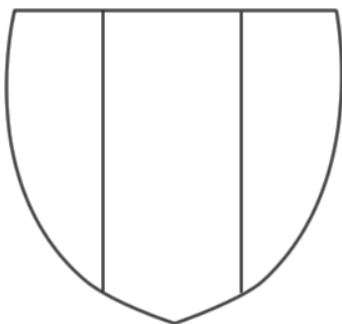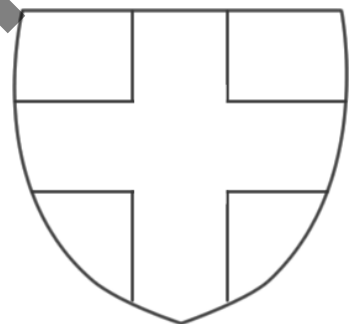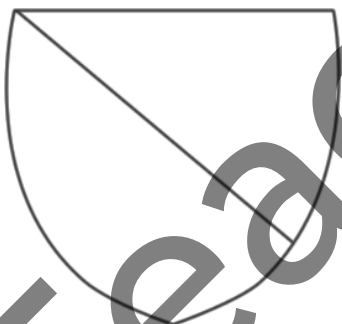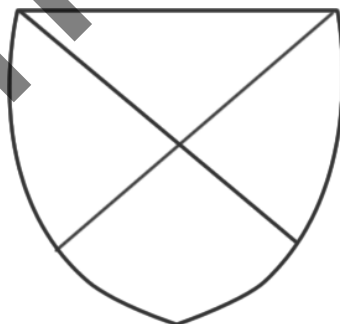
Party
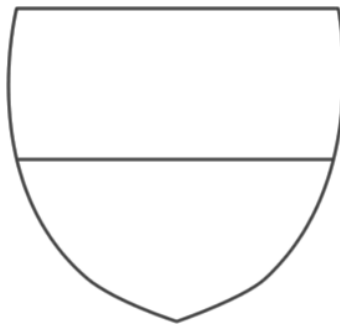
Party-fesswise

Quarterly

Pale

Fesse

Cross

Party-bendwise

Party-saltirewise
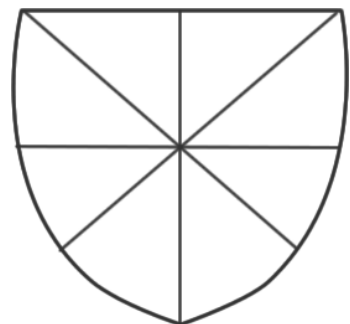
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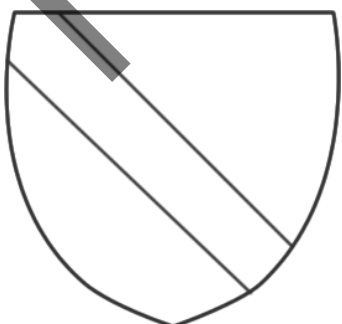
Bend
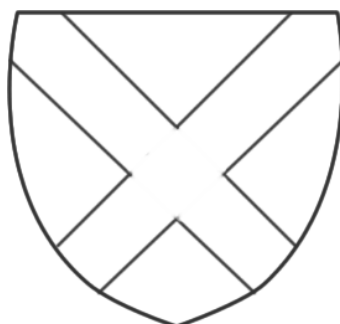
Saltire
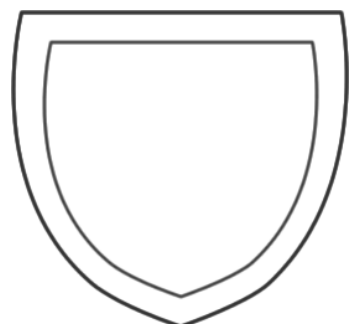
Border

A knight's shield may also have an animal such as a bird or a lion. This would have also appeared on the cloak covering your armour (surcoat) and the cloth covering your horse (trapper). Think about which animal you would like to have on your shield and what it represents about you.

Draw out your shield design including the animal of your choice. Include an explanation of your animal choice.

Explain your animal choice for your shield:

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The trebuchet was the siege machine of choice during the middle ages. It was such an accurate weapon with an impressive projectile range (it fired a long way!) that it was kept in use long after the introduction of cannons.

Construct a simple working model of a trebuchet as shown below. You will use your model to carry out an investigation to look at the weight of missiles and the impact on the distance they travel.

You will need:	Test model of trebuchet
30cm ruler plasticine two wooden blocks plastic rod/straw cotton-wool ball force meter tape measure	plasticine guard — ruler — wooden block — plasticine counter balance

Key questions:

What effect do you think the weight of the counterbalance will have on the distance the missile (cotton-wool ball) travels?
How will you ensure the test is fair?
What will you keep the same and what will you change?
What effect will repeated testing have on the 'quality' of your results?

NOTE: Accuracy is very important! Use the force meter to weight your plasticine counterbalances.

Recording results:

Mass of plasticine (g)	Distance travelled by cotton-wool ball(cm)		
	Attempt 1	Attempt 2	Attempt 3

What do your results show about the link between the weight of the counterbalance and the distance the missile travelled?

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Were there any issues with your testing that may impact on the accuracy of your results?

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> Plan an investigation that looks at the weight of the missile on how far it will travel. Consider what you will keep the same and how you will carry out the investigation fairly.

What impact do you think the weight of the missile will have on the distance travelled?
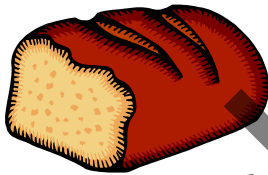
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Medieval recipes

Rose petal bread

For 2 loaves you will need:

1 packet dry yeast

375ml lukewarm rose water

1 tablespoon sugar

2 teaspoons salt

400g flour

1 teaspoon butter

food colouring

1 egg white

- Make the rose water by simmering rose petals in a small amount of water for 15 minutes. Leave to cool and sieve out the petals.
- Dissolve the yeast in the rose water and stir in the sugar and salt.
- Slowly sieve in the flour and mix with a knife.
- Pour out the flour mixture onto a floured surface and knead for 10 minutes until the dough becomes smooth and elastic.
- Cover and leave the dough to prove for an hour in warm place.
- Divide the dough in half. Form each half into a circle and place onto a buttered baking sheet.
- Mix the food colouring with the egg white and use to decorate the dough.
- Bake in an oven for 40 minutes at 200°C.

Frumenty (wheat porridge)

You will need:

225g cracked wheat

250ml water

150ml milk

2 egg yolks

½ teaspoon salt

pinch of saffron

- Boil water and add cracked wheat. Cover and simmer for 10 minutes.
- Whisk milk and egg yolks and add to the wheat mixture.
- Stir in the remaining ingredients.
- Add sugar to taste.

Medieval recipes

Gyngerbrede

You will need:

450ml honey

½ teaspoon white pepper

1 teaspoon cinnamon

1 teaspoon ginger

pinch of saffron

2 loaves of bread crumbs

- Heat honey to a slow boil and simmer for 10 minutes.
- Add the saffron, pepper, cinnamon and bread crumbs. Mix well.
- Spoon out into small balls and leave to cool.

Apple muse

You will need:

2 apples

225ml pint milk

2 tablespoon ground almonds

4 teaspoons honey

225g bread crumbs

Pinch of saffron

Pinch of salt

- Add the almonds to the milk and infuse for a couple of hours.
- Peel, core and slice the apples. Add to a small amount of water and boil.
- Pass cooked apples through a sieve.
- Mix almond milk, honey, saffron, salt and bread crumbs together. Add to apple mixture and simmer.

Serves 4

Which parts of my research were most helpful?

I would give myself:

/10 for effort

/10 for final product

How well did my design match the final product?

Something I would improve…

Designing

Final piece

Evaluation mind-map

Making

Five words to describe my finished piece:

A skill I was good at…

A skill I could improve …

The part I enjoyed the most was …