|  |  |
| --- | --- |
| **Box 3 - Individual Objects** | |
| Below is a series of lessons based on the individual objects contained within Box 3. Similar objects have been grouped together. If, while investigating the boxes, pupils seem particularly interested in an individual object you can use these to expand their learning.  These lessons are formatted to make them easy to deliver. The idea is that you take the sections that are relevant to you and build them into a lesson. There is a generic introduction and plenary which will bookend whatever lessons you plan to deliver but are still worthwhile sections that will provide the chance to stimulate discussion and reflection at each end of the lesson.  The main part of the lesson is built of two parts. First there is a bespoke activity based on teaching one or two of the most interesting aspects of the object (identified by archaeologists). The second part has the pupils use the information sheets containing fantastic summaries of the history of each object to create a quiz, presentation or something similar. These sections primarily utilise co-operative learning strategies, however, rather than write these out each time, a list of different strategies has been included at the end of the document. Choose whichever you think will be most effective with your class.  Using those four parts: the introduction, the main lesson task, the information sheets and the plenary you can construct a lesson to suit your needs. You could even choose to cover two, three or four objects in one lesson and, having arranged the class into groups, have them produce a presentation about the different objects. These plans are meant to be as versatile as possible for teachers, hopefully meaning they are useful and worthwhile.  Finally, these plans are split into Primary and Secondary versions. They may need a little tweaking depending on the abilities of your class but otherwise should suit the levels within those sectors. | |
| **Curriculum Links - Social Subjects (People, Past Events and Societies)** | |
| Experiences and Outcomes (First Level) | Benchmarks |
| I understand that evidence varies in the extent to which it can be trusted and can use this in learning about the past. SOC 1-01a  By exploring places, investigating artefacts and locating them in time, I have developed an awareness of the ways in which we remember and preserve Scotland’s history. SOC 1-02a  I can use evidence to recreate the story of a place or individual of local historical interest. SOC 1-03a  I can compare aspects of people’s daily lives in the past with my own by using historical evidence or the experience of recreating an historical setting. SOC 1-04a  Having selected a significant individual from the past, I can contribute to a discussion on the influence of their actions, then and since. SOC 1-06a | * Identifies the difference between a more and less trustworthy source. * Draws a short timeline and can locate two or more events on the line in the correct order. * Uses information learned from sources to relate the story of a local place or individual of historic interest though media such as drawings models or writing. * Draws comparisons between modern life and life from a time in the past. * Names a figure from the past and comments on their role in events. |
| **Curriculum Links - Social Subjects (People, Past Events and Societies)** | |
| Experiences and Outcomes (Second Level) | Benchmarks |
| I can use primary and secondary sources selectively to research events in the past. SOC 2-01a  I can interpret historical evidence from a range of periods to help build a picture of Scotland’s heritage and my sense of chronology. SOC 2-02a  I can investigate a Scottish historical theme to discover how past events or the actions of individuals or groups have shaped Scottish society. SOC 2-03a  I can compare and contrast a society in the past with my own and contribute to a discussion of the similarities and differences. SOC 2-04a  I can discuss why people and events from a particular time in the past were important, placing them within a historical sequence. SOC 2-06a | * Uses both primary and secondary sources of evidence  in an investigation about the past. * Places an event appropriately within a historical timeline. * Describes at least two ways in which past events or the actions of individuals or groups have shaped Scottish society. * Describes and discusses at least three similarities and differences between their own life and life in a past society. * Contributes two or more points to the discussion  (in any form) as to why people and events from  the past were important. * Places those people and events on a timeline. |

|  |  |  |
| --- | --- | --- |
| **Introduction** | | **10 minutes** |
| **What is It?** (10 minutes) | Resources: Resources:  Objects: selected from Box 3  Information Sheets: Object information sheets, using the photograph side (download to project them) | |
| * All lessons start with this activity to recap or introduce the object to the pupils. * It is optional but worth doing. | | |
| Show the object to the class. Have the pupils handle the object and ask them to look closely at it. At the same time show the picture of the object on the board for those who are waiting to see it. While the object is going round the room ask the class to think about the answers to these questions (individually):   * ***What is it?*** * ***What is it for?*** * ***What is it made of?*** * ***How can you tell?***   Whichever way the task is completed, have the pupils feedback their responses to the class. | | |

|  |  |  |
| --- | --- | --- |
| **Pictish Carved Stone** | | **45 minutes** |
| **Learning Intentions** | **Resources and Essential Reading** | |
| I can explain how people in the past used art to communicate. | Resources:  Object: Pictish stone (Box 3)  Information Sheet: Pictish Carved Stone object sheet, When? Pictish, Additional image Hilton of Cadboll Cross Slab, Sandwick Pictish Cross Slab  Lesson Resources: Pictish Carved Stone Design Sheet, Charades Cards  Other Resources: A4 Paper | |
| **Lesson Plan** | | |
| * There are a range of interesting aspects to explore when working with the Pictish carved stone, too many to fit into one lesson. It is a subject well worth exploring further. * This lesson focuses on the meaning of the carvings on the Hilton of Cadboll and what was being communicated. | | |
| Show the pupils the section of the Hilton of Cadboll stone in Box 3. Ask the pupils ***What can you see carved into this piece of stone?*** This particular section contains the image of a bird with a plant winding around it.  Ask ***What type of stone is this?***And ***Why do you think they used this stone?*** The stone is sandstone and it was used because it was relatively easy to carve and because the stone could be sourced locally.  In Crafting Lesson Eight - Pictish Stone Carving the class are tasked with interpreting what the stone is telling them, as it must be communicating something to observers. This was introduced with the idea of charades. If you have not completed that lesson, you can add the charades game in here as a way of introducing the concept. If you have completed the lesson you can either skip it or repeat it as a recap.  \*  *Charades* ***(OPTIONAL****):* *Play a game of charades with the class. Ask for a volunteer and hand them one of the charades cards containing one of the written phrases included below.*  *I love hunting, Time to eat, I have long hair, Chopping wood, You are tall, Fire!, I am cold, Don’t go in there, Bear!*  *The volunteer is to try and act out the phrase for their peers who are to trying to guess what is written on the card. If a pupil guesses the phrase, they can then come out and have a go themselves using a new phrase. After all the phrases have been used (or you want to push the lesson on), ask the class* **Do you always need words to communicate?**  **\***  Display the picture of the Hilton of Cadboll stone. Look carefully at the central panel depicting the figures on horses. Explain that it is a Pictish carving and therefore gives clues to the Pictish way of life. As a *think-pair-share* exercise ask the pupils to name all the different things they can see (there are numerous things, horses, dogs, people, shields, a mirror, comb, a woman wearing a brooch etc.) Collate all their answers.  Next ask ***What are they doing and how can you tell?*** This section of the stone depicts a hunt of some sort. The use of dogs chasing the prey in the lower left corner supports this idea.  Ask ***What else can we learn from this stone?*** There are a range of potential answers from this carving. For example, the mirror and comb clearly have some significance and appear on a number of Pictish stones; it is worth having the pupils make suggestions as to what their significance might be. Explore the different answers you receive from the class.  Finally we are going to finish by designing a carved stone. Give each pupil the Pictish carved stone design sheet and ask them to continue the design of the Pictish carved stone from the box. Explain to the class that the design needs to show something about their school. For example, it could be the different sports that take place or what lessons they learn. Ask the pupils to think***If someone found our drawing in one thousand years time, what would you want them to know about our school?***  Have the pupils draw their design and then outline their drawing in black pen. At this point you can choose what the next stage is. The pupils could colour their image or you could use teabags to age the image. Put the designs together into a large piece of art and display. Ask each pupil to show their design and discuss the images with the rest of the class. | | |
| **Information Sheet** | | |
| * Every object in the loans box has an information sheet that accompanies it. * This activity is included in each object lesson. * Different ways of working through the information has been detailed below in the teaching notes section. Choose whichever fits the composition and abilities of your class. | | |
| Hand out the Pictish Carved Stone object sheet. Using one of the activity ideas below, have the pupils read the information and share it within their groups. (1)  Once they have shared the information the groups are to create a quiz, poster, presentation, infographic or complete an individual activity based on what they have read. (2)  These are just some suggestions for creating an activity based on the individual objects. Feel free to alter the activities however you wish. For example you could have the class produce a piece of writing, a piece of art work or take part in a debate. This lesson is a brief look at the object and will hopefully stimulate further learning and discussion. | | |

|  |  |  |
| --- | --- | --- |
| **Antler Comb** | | **35 minutes** |
| **Learning Intentions** | **Resources and Essential Reading** | |
| I am developing an understanding of life in the Iron Age and Early Historic period.  I can contrast my own life with people living in the Iron Age and Early Historic period. | Resources:  Objects: Antler comb (Box 3)  Information Sheets: Antler Comb object sheet  Other Resources: Pillow case (or similar) | |
| **Lesson Plan** | | |
| * The comb shows that Iron Age and Pictish people were concerned with their appearance and had an interest in owning beautiful objects with interesting designs. * The comb itself is also evidence for the range of tools (such as saws, drills, hammers etc.) which were needed to produce the comb. | | |
| In Crafting Lesson Six - Bone and Antler Working the object was introduced by hiding it under a pillow case and having someone describe it to the class. If you have not already completed that lesson you can add that activity here as a way of introducing the object. If you have already delivered lesson six you can skip the following section.  \*  *Before the lesson cover the antler comb with a pillow case/tea towel or something similar. Ask for a volunteer and have them come out to the front. They are to feel the object and describe it to the rest of the class without telling them what it is. The rest of the pupils are to try and guess what it is. When a pupil has successfully guessed, show them the object. As it is being passed round ask the class* **What interesting thing do you notice about the comb?***Explain to the class that this is a replica of a Pictish antler comb. Using the timeline highlight the Pictish time period and work out how long ago the Picts lived, if time allows.*  \*  Ask the class ***What is the comb made from?*** The comb is made from deer antler although combs can be made from bone as well. Ask ***Why would Pictish people use bone and antler?***It was both readily available and a by-product of eating meat.  Ask ***What do you use a comb for and what does that tell us about Pictish people?*** The comb shows us that they took some care over their appearance. Highlight the decoration and ask ***Why would you decorate this object?*** And again the answer is because people were interested in appealing objects and so would take the time to decorate them.  To finish this section of the lesson ask the pupils to find an object from the classroom and sit back in their seats. Ask them to show their objects one at a time. As each pupil shows their object the rest of the class can discuss whether those objects would have existed in Pictish times. This could be completed as a research exercise with pairs choosing an object and seeing whether they can find evidence of such an object in Pictish times. Otherwise it can simply be a discussion.  Some objects like pencils could produce interesting debates. Pencils, as we know them, were not produced but charcoal and ink were definitely available. It does not matter whether you know the definite answers. The idea is to explore what the pupils think and start to build a picture that life in the past is not always that different to how we live today. | | |
| **Information Sheet** | | |
| * Every object in the loans box has an information sheet that accompanies it. * This activity is included in each object lesson. * Different ways of working through the information has been detailed below in the teaching notes section. Choose whichever fits the composition and abilities of your class. | | |
| Hand out the Antler Comb object sheet. Using one of the activity ideas below, have the pupils read the information and share it within their groups. (1)  Once they have shared the information the groups are to create a quiz, poster, presentation, infographic or complete an individual activity based on what they have read. (2)  These are just some suggestions for creating an activity based on the individual objects. Feel free to alter the activities however you wish. For example you could have the class produce a piece of writing, a piece of art work or take part in a debate. This lesson is a brief look at the object and will hopefully stimulate further learning and discussion. | | |

|  |  |  |
| --- | --- | --- |
| **Willow Basket** | | **40 minutes** |
| **Learning Intentions** | **Resources and Essential Reading** | |
| I can explain weaving techniques in prehistoric times.  I can suggest how woven objects were used and compare them with modern objects. | Resources:  Objects: Baskets (Box 3)  Information Sheets: Baskets object sheets, Timeline  Other Resources: plastic bag | |
| **Lesson Plan** | | |
| * Basketry has been a craft used throughout history and is still used today in the 21st century. * Very few examples of baskets survive due to the nature of the materials used. Some do survive due to fortunate preservation, usually in low oxygen environments. | | |
| As a *think-pair-share* exercise, ask the class to ***Name all the times you have used a bag or basket in the last week.*** Collate the answers on the white board.  Show the class the wicker basket and ask them ***Why do we use bags and baskets?*** You may have to explain that it is not a trick question and the simple answer of “to carry things” is what you are hoping they will say – the reason why will become clear. Follow up with the question ***Why would prehistoric people need baskets?*** Again the answer should be obvious. They could be used to carry all sorts of things, including fish, harvest crops, washing, wool etc.  Explain that the point of those questions is to highlight that people in the past weren’t all that different to us and in fact some parts of their life were remarkably similar. Ask the class to consider, individually, one thing they think is the same now as it was in the past (there are lots of answers but you could give the following examples to help stimulate different responses: hunting, making clothes from wool, the use of tools such as axes etc.) Give the pupils thirty seconds to think of their answer on their own.  Have the pupils share their responses with their partner. Next join the pairs into groups of four (or as close to four as possible) and have them share all their answers as a small group. Finally collate all the answers on the board. This should demonstrate that although people lived differently in the past, there are still a lot of similarities.  Ask the class ***Who has a wicker basket (or wash basket) at home?*** Explain that baskets are found in all time periods; we even use them now. As a *think-pair-share* exercise ask ***Why do you think they were used throughout history?***There are a lot of reasons why baskets were used: they were versatile, easy to make, easy to maintain and willow grows rapidly and can be used year on year.  Have two pupils hold up the timeline from the loans box and point to its earliest date. On the board demonstrate the number line method (also known as “the jump strategy”) for finding the difference between two numbers (jump from 8,500 BC to 0, from 0 to 2000 and finally from 2000 to the current date, and then add the jumps together to calculate the number of years that have passed). Explain that this is how longthat we suspect basketry has been used by people in the past. We have evidence of baskets dating back to the Bronze age but it is probable that they were used earlier in history.  Show the class a plastic bag and place it next to the wicker basket. As a *think-pair-share* exercise (using a white board to record their answers), have the class compare and contrast the basket and the plastic bag. For example, they should notice the bag is flexible while the basket is solid, heavier and sturdier. Collate the class’ answers.  Ask the class ***Which is better for the environment?***  And then ask ***Why?*** There are a number of different aspects in the basket’s favour: the basket is fully reusable and was made using completely renewable resources (and in the process of the willow re-growing, it will absorb more carbon dioxide from the atmosphere). Finish with the question ***Are there any more benefits of using baskets?***They can be made to different sizes with lids and cloth interiors, they can be different shapes to suit different tasks, they are not as potentially dangerous as plastic bags etc. Collate all answers on the board.  At this point you can simply continue onto the next part of the lesson or use one of the following additional tasks.   1. Create a basket: Although this requires a significant investment of time and resources (in the form of willow) it is worth doing. There are many tutorials online including great videos suitable for children. This could also be completed as an extension activity for the whole class, by allowing small groups to work on the basket at different times of the day. 2. Create a persuasive poster/letter/advertisement: The aim of this activity is to have pupils extol the benefits of willow baskets over plastic bags and to create a text persuading others to use them. | | |
| **Information Sheet** | | |
| * Every object in the loans box has an information sheet that accompanies it. * This activity is included in each object lesson. * Different ways of working through the information has been detailed below in the teaching notes section. Choose whichever fits the composition and abilities of your class. | | |
| Hand out the Basket object sheet. Using one of the activity ideas below, have the pupils read the information and share it within their groups. (1)  Once they have shared the information the groups are to create a quiz, poster, presentation, infographic or complete an individual activity based on what they have read. (2)  These are just some suggestions for creating an activity based on the individual objects. Feel free to alter the activities however you wish. For example you could have the class produce a piece of writing, a piece of art work or take part in a debate. This lesson is a brief look at the object and will hopefully stimulate further learning and discussion. | | |

|  |  |  |
| --- | --- | --- |
| **Hurdle** | | **45 minutes** |
| **Learning Intentions** | **Resources and Essential Reading** | |
| I can explain weaving techniques in prehistoric times.  I can suggest how woven objects were used and compare them with modern objects. | Resources:  Objects: Hurdle (Box 3)  Information Sheets: Hurdle object sheet, Timeline  Other Resources: paper for weaving, scissors, rulers | |
| **Lesson Plan** | | |
| * Hurdles have been used throughout history and are still used today in the 21st century. * Very few examples of ancient hurdles survive due to the nature of the materials used. Some do survive due to fortunate preservation, usually in low oxygen environments. | | |
| To be completely honest, the best activity to teach in relation to the hurdle is to have the pupils create their own. If you wish to do this, and haven’t referred to it already, see Crafting Lesson Nine – Green Woodworking, Textiles and Basketry which contains instructions for creating your own hurdle.  Otherwise the following activity can be used to teach some of the specific interesting aspects of the use of hurdles throughout history.  Show the class the hurdle. Explain that it is made from willow which is flexible when cut and can be used to create objects such as hurdles and baskets.  Display the timeline at the front of the classroom. Show the class the willow hurdle. Ask the class ***Which time period do you think people first started using hurdles?*** This can be answered with a show of hands but it may be more interesting to write each time period on a white board and have the pupils line up behind their answer. This can also be used as a physical bar chart as an information handling exercise. Explain to the class that it is a very difficult question to answer. We suspect that hurdles were possibly used during the Neolithic period and while no evidence is available for their use during the Mesolithic in Scotland, archaeologists can’t completely rule it out as a possibility.  Explain that hurdles are found in all time periods, we even use them now. As a *think-pair-share* exercise ask ***Why do you think they were used throughout history?***There are a lot of reasons why hurdles were used: they were versatile, easy to make, easy to maintain, willow grows rapidly and can be used year on year.  Ask a *think-pair-share* activity ask the class ***What do you think they were used for?*** Hurdles were used as fences, gates and walls for buildings. Have the class share their answers. Explain that hurdles could be made into many different shapes and so were very versatile.  The next section is designed to demonstrate the process of weaving by creating a paper woven design. There are many videos explaining this process but if you are unfamiliar an explanation is written below.  Cut a piece of coloured paper into a square shape. Fold the paper in half. Measure and draw vertical lines one inch (25mm) apart and one inch (25mm) in from the edges. The lines should extend from the fold and stop one inch (25mm) from the edge of the paper. Cut along the lines. Unfold the paper. Cut strips of a different coloured paper. They need to be one inch (25mm) thick and the same width as the square. Weave the strips in and out of the paper square making sure to alternate the pattern.  When the class has finished their paper weaving ask ***What would happen if you left this paper weaving outside?***Hopefully the class will explain that it will rot away. Follow up with the question ***What would happen if you left the hurdle (show hurdle) outside for a very long time?***It too would rot away.  Explain that this is the reason we find very few hurdles. They rot away over time, but occasionally one is preserved by chance. | | |
| **Information Sheet** | | |
| * Every object in the loans box has an information sheet that accompanies it. * This activity is included in each object lesson. * Different ways of working through the information has been detailed below in the teaching notes section. Choose whichever fits the composition and abilities of your class. | | |
| Hand out the Hurdle object sheet. Using one of the activity ideas below, have the pupils read the information and share it within their groups. (1)  Once they have shared the information the groups are to create a quiz, poster, presentation, infographic or complete an individual activity based on what they have read. (2)  These are just some suggestions for creating an activity based on the individual objects. Feel free to alter the activities however you wish. For example you could have the class produce a piece of writing, a piece of art work or take part in a debate. This lesson is a brief look at the object and will hopefully stimulate further learning and discussion. | | |

|  |  |  |
| --- | --- | --- |
| **Lead Seals** | | **40 minutes** |
| **Learning Intentions** | **Resources and Essential Reading** | |
| I can explain how artefacts can help us understand life in the past. | Resources:  Objects: Lead seals box (Box 3. Note, the small box with seals does not open)  Information Sheets: Lead Seals object sheet  Lesson Resources: Lead Seal Design Sheet  Other Resources: Map of Europe, Image of wax letter seal | |
| **Lesson Plan** | | |
| * These seals show early evidence of globalisation as trade was conducted across the world. * Seals were often discarded and as a result they have been found in fields around Cromarty. | | |
| Show the pupils the box containing the lead seals (note that the seals are not for handling individually, as they are made of lead). Ask ***What do they look like?*** The seals look a little like coins. Have the pupils look closely at the seals and discuss what can be seen. Explain to the class that it is a lead seal and ask these questions:   * ***Have you ever seen a seal?*** * ***Where have you seen one?*** (Show an image of a wax letter seal on the board) * ***What might a seal be used for?***   Effectively seals are a way of guaranteeing authenticity or privacy. When the queen uses a wax seal on a letter it shows the recipient that it has come personally from the queen. When you open the letter you “break the seal”.  Hand the box to a pupil and ask them to look closely at the seals. Ask ***What do you see?*** There are letters stamped onto the lead seal. These letters provide information about the quality and origin of the objects the seals were attached to.  As a *think-pair-share* exercise, ask the class the following two questions (the pupils are not expected to know the answers but rather make an educated guess):   * ***What was being transported?*** * ***Where did it come from?***   Collate their possible answers on the board. Explain to the pupils that the seals were attached to something before being traded.  Show a map of Europe on the board. Ask a pupil to point out the Baltic sea. Explain that the seals are replicas of those sent from Russia attached to bales of flax and hemp. These bales were shipped over sea to the UK and, in the case of our artefact, to Cromarty.  Ask ***What do you think people made with the flax and hemp?***The flax was spun into thread which was then sent to mills to make cloth and bags while the hemp was mainly used to make rope. Using a volunteer have a pupil look at the seals and see if they can find a date showing when the bales were sent. Explain that these seals were used to guarantee a quality product.  Ask ***What happened to the cloth and bags?***They were sold all over the world. Explain that this shows how trade was international. Flax came from Russia, was turned into cloth, woven into a product and then sent all over the world.  Give the pupils the Lead Seal Design sheet. Ask the pupils to design their own seal. It needs to have three elements: the date, an image or symbol to represent the pupil (this could be a football or flower or gamepad - something that shows what the pupil is interested in) and lettering showing the pupil’s name/initials. | | |
| **Information Sheet** | | |
| * Every object in the loans box has an information sheet that accompanies it. * This activity is included in each object lesson. * Different ways of working through the information has been detailed below in the teaching notes section. Choose whichever fits the composition and abilities of your class. | | |
| Hand out the Lead Seals object sheet. Using one of the activity ideas below, have the pupils read the information and share it within their groups. (1)  Once they have shared the information the groups are to create a quiz, poster, presentation, infographic or complete an individual activity based on what they have read. (2)  These are just some suggestions for creating an activity based on the individual objects. Feel free to alter the activities however you wish. For example you could have the class produce a piece of writing, a piece of art work or take part in a debate. This lesson is a brief look at the object and will hopefully stimulate further learning and discussion. | | |

|  |  |  |
| --- | --- | --- |
| **Viking Ring Money** | | **45 minutes** |
| **Learning Intentions** | **Resources and Essential Reading** | |
| I can explain how “currency” helped develop trade. | Resources:  Objects: Viking ring money (Box 3)  Information Sheet: Viking Ring Money and Arabic Coins object sheet, Timeline, Additional image: Map of Viking Europe  Other Resources: Balance scales | |
| **Lesson Plan** | | |
| * Ring money allowed for a relatively consistent “currency” across the Viking world (an extensive area of the globe). * Ring money was occasionally decorated and worn on one’s person, an interesting contrast to life today. | | |
| While this lesson is stand-alone it forms a natural progression to the Silver Coins lesson below and so works well in conjunction with it.  This first part may be a recap if the pupils have already completed the crafting Lesson Seven – Silver Working. Show the class the timeline. Show them the Viking period labelled on the timeline. As a class work out how long ago, roughly, the Viking era began and ended using the dates on the timeline.  Next display a map of Viking Europe on the board. Explain that the Vikings settled and traded over a wide area that stretched from Scandinavia to Scotland, Greenland and even to North America. They raided areas as wide ranging as the Middle East and Northern Africa. Show these areas on the map. Explain that the Vikings ranged far and wide and engaged in a lot of trade. However, ask the class ***If they didn’t make their own coins how could they pay for things?***  Show the class the replica ring money. Ask them ***What do you think these bracelets would be made of?*** Although the replica is pewter the real objects would be made of silver. Then ask as a *think-pair-share* exercise ***Why silver?*** Silver, being a precious metal, is relatively rare. It also has some other useful properties: it is inert and therefore doesn’t react with other substances, and it is fairly easy to work as it can be annealed (softened through heating) and shaped with a hammer and anvil. You can choose how much detail you wish to go into with your class.  If you have completed Crafting Lesson Seven - Silver Working, you may have already made a class set of home-made balance scales (if not it may be worth reading through the lesson and considering completing that particular task as part of this lesson instead), or you may have a set of balance scales in the school which will work perfectly well for this next task.  Recap with the class that the bracelets are a form of money. If someone wanted to pay for something they would take their bracelet off, take out a set of balance scales (portable ones) which they would then use to weigh the bracelet. This could then be weighed against known weights.  To demonstrate this complete one of the following activities:   * Using the hand-made balance scales place a known weight on one side and, splitting the class into small groups or pairs, have the groups try and find a set of objects that are as close as possible to the known weight. Make a show of having the groups add their objects to the balance scales one by one. * Split the class into pairs). Have the pairs find a range of objects from the classroom - they need to make sure they will fit on the balance scales. Join the pairs into groups of four. Give the groups a balance scale. The aim is to place an object on the scale without it falling off. The pairs take it in turns to add an object. As more objects are piled on, it gets increasingly difficult.   As a *think-pair-share* exercise, ask the class ***What different currencies are there? Does everyone use pounds around the world?*** Collate their answers on the board. Follow up with ***What problems do the different currencies cause?***Effectively you are hoping the pupils will realise that they need to be exchanged when travelling from one place to another. Finally finish by asking ***What benefits does using weight of silver have over particular coins?*** It is pretty much universal, no matter where you went there was a way of paying for something. It wasn’t perfect but allowed the Vikings to trade over a vast area. | | |
| **Information Sheet** | | |
| * Every object in the loans box has an information sheet that accompanies it. * This activity is included in each object lesson. * Different ways of working through the information has been detailed below in the teaching notes section. Choose whichever fits the composition and abilities of your class. | | |
| Hand out the Viking Ring Money and Arabic Coins object sheet. Using one of the activity ideas below, have the pupils read the information and share it within their groups. (1)  Once they have shared the information the groups are to create a quiz, poster, presentation, infographic or complete an individual activity based on what they have read. (2)  These are just some suggestions for creating an activity based on the individual objects. Feel free to alter the activities however you wish. For example you could have the class produce a piece of writing, a piece of art work or take part in a debate. This lesson is a brief look at the object and will hopefully stimulate further learning and discussion. | | |

|  |  |  |
| --- | --- | --- |
| **Silver Coins** | | **45 minutes** |
| **Learning Intentions** | **Resources and Essential Reading** | |
| I can explain how currency has developed. | Resources:  Objects: Medieval coin die and coins  Information Sheets: Medieval Coin Die and Coins object sheet  Other Resources: A4 Paper, Five pound note, modern coins | |
| **Lesson Plan** | | |
| * The coins minted by Alexander III were the first to be created in the Highlands of Scotland. * The first coins to be minted in Scotland were from around 1140, showing that the Scottish kingdom was powerful enough to begin minting its own coins. | | |
| While this lesson is stand-alone, it forms a natural progression from Viking ring money and if possible it is worth teaching in conjunction with that lesson. Ask the class ***Imagine there was no money, no coins, no notes, how would you pay for anything****?* The answers to this question might be very varied but essentially you are hoping the pupils come to the conclusion that you would have to swap things. It may be that some follow up questions are needed.  If the class has completed the crafting Lesson Seven - Silver Working this may be a recap. Arrange the class into small groups. Give each group a range of modern coins and each pupil a piece of A4 paper. Have the pupils complete rubbings of the different coins on their table, both sides, and as many different denominations as possible. As they are completing the rubbings have them pay close attention to the elements of the coins. Ask ***What things do you notice on the coin?***There are four elements that are worth ensuring the pupils are aware of: the image of the monarch, the date it was minted, the place it was minted and how much the coin is worth.  Gather the pupils round and show them a five pound note (you can use other notes if you really, really want to…). Have the pupils look closely at the note. Ask ***What things do you notice?***Again they should notice an image of a person (although not necessarily the reigning monarch), the amount it is worth and the issuing bank.  Ask a pupil to read the small text written beneath the issuing bank: “Clydesdale Bank PLC (or similar if an English note or one issued by the Bank of Scotland) promise to pay to the bearer on demand Five Pounds Sterling at their office here By order of the board of directors”. As a *think-pair-share* task, ask ***What do you think that means?***  Explain that it refers to a time in the past when the value of a coin was based on what it was made of. Ask, as a *think-pair-share* question ***Can you name any valuable metals?***Hopefully the pupils will be able to name a few different valuable metals such as gold, silver, platinum etc. Explain that when paper currency was first created the idea was that a bank held a weight of precious metal (in this case pounds) to back up the currency, meaning that the coins or notes could be exchanged for the same weight in precious metal. That is not the case today. However, in Medieval times coins were made from actual silver.  Show the class the replica Medieval silver coins from Box 3. Arrange the class into small groups. Explain that these coins are replicas of some of the first coins minted in the Highlands, at Inverness. Have the groups try and find the four main elements found on modern coins (picture of the monarch, date minted, place minted and value). Ask ***Can you find them all?***  Staying in the groups, have the pupils complete rubbings of the replica coins, both front and back.  As a *think-pair-share* exercise ask ***So what did people use before these coins?*** They used objects to barter, valuable precious metals or coins from other places. For example a number of English coins have been found in archaeological dig sites in Scotland. | | |
| **Information Sheet** | | |
| * Every object in the loans box has an information sheet that accompanies it. * This activity is included in each object lesson. * Different ways of working through the information has been detailed below in the teaching notes section. Choose whichever fits the composition and abilities of your class. | | |
| Hand out the Medieval Coin Die and Coins object sheet. Using one of the activity ideas below, have the pupils read the information and share it within their groups. (1)  Once they have shared the information the groups are to create a quiz, poster, presentation, infographic or complete an individual activity based on what they have read. (2)  These are just some suggestions for creating an activity based on the individual objects. Feel free to alter the activities however you wish. For example you could have the class produce a piece of writing, a piece of art work or take part in a debate. This lesson is a brief look at the object and will hopefully stimulate further learning and discussion. | | |

|  |  |  |
| --- | --- | --- |
| **Iron Nail** | | **50 minutes** |
| **Learning Intentions** | **Resources and Essential Reading** | |
| I can describe the process of smelting iron.  I can identify the importance of iron working in the progression of technology through time. | Resources:  Objects: Nails (Box 3)  Information Sheets: CT Iron Working, Iron Nails object sheet  Other Resources: *Blacksmithing - Iron Smelting and Forging a Poor Bloom* video [[link](https://www.youtube.com/watch?v=gPf08sFpNXA)], Sticky labels | |
| **Lesson Plan** | | |
| * Iron nails are instantly recognisable for most pupils. * While a seemingly innocuous object their impact and importance as a technological advancement far exceeds their small size. | | |
| Show the class the two iron nails, the replica square section nail and the genuine corroded iron nail. Ask the class ***What are these for?*** While the answer to this question seems obvious and to some degree it is, it is included to start pupils considering the larger context of nails. Follow this question up with ***What different ways are nails used today?*** This could be completed as a paired activity. Collate the pupils’ answers on the board. As a *think-pair-share* activity ask the class to look over their answers and decide which would be true of the past. For example, using nails to build houses was also true in the Iron Age. Explain that nails are such a versatile building material that their use has continued throughout history.  Finish this section with the question ***We use nails for a lot of different purposes. What do you think was used before iron nails such as these?*** Whether they find the “correct” answer is unimportant. Explain that nails are another technological step that allowed people to produce more complex permanent structures, attach horseshoes and even build bigger boats..  Show the corroded nail. Ask the pupils ***What has happened to this nail?*** It has corroded leaving a coating of rust. Follow up with the question ***Why might this be a problem for archaeologists?*** The objects tend to be poorly preserved and difficult to identify. Explain that an x-ray can be used to “see” beneath the rust and give a better idea of the general shape of the object (an example is shown on the object sheet).  Explain to the pupils that they are going to watch a video demonstrating the iron working process. This video shows how long and repetitive it is to produce a piece of usable iron. The time stamps for the video are included below. The video shows that smelting iron is not always entirely successful as the end product is not quite what the blacksmith hoped. The video is titled *Blacksmithing - Iron Smelting and Forging a Poor Bloom’;* the [link](https://www.youtube.com/watch?v=gPf08sFpNXA) is included below (please note this video was produced by a third party in no way affiliated with ARCH. While this video is considered safe for a classroom environment it is no way an endorsement of any other videos on the channel or its associated content).  ***Blacksmithing - Iron Smelting and Forging a Poor Bloom***  **0:00 -** Preparing the furnace.  **0:33 -** Adding the powdered iron oxide (iron ore) to the furnace.  **1:02** - Example of bellows used to build heat in the forge by providing airflow over the charcoal.  **1:52** - Airflow removed from furnace.  *These first two minutes highlight the information provided in the first two paragraphs of the information sheet. When the airflow is removed and charcoal tampered down, a “bloom” is formed.*  **2:50** - “Bloom” removed from the furnace.  **3:05** - Initial hammering to remove major impurities.  **3:58** - Showing the largest piece formed in the furnace.  **4:10** - Forging the iron. This is a long process of repeated hammering and heating. You can see the gradual reduction in size of the iron as impurities are removed over time.  **5:26** - Beginning to shape the iron.  *The process of working the iron takes a long time and this video does a good job of showing the effort that is involved to produce even a small piece of useable iron.*  **8:29** - Showing the final piece of iron which can then be worked further to create objects such as nails.  Explain to the class, that all this effort was needed just to create a small piece of iron. The nail itself hasn’t even been started yet. Ask the class ***How many nails do you think were used to build the house in which you live?*** The answer is likely many thousands. Explain to the class that modern nails are produced by machines and so are used much more liberally than they were in the past. Even so, to produce even a hundred nails was a HUGE investment of time, energy and skill.  ***OPTIONAL****: The following activity is a practical exercise in explaining the chemical process of smelting iron. While it is optional it does produce greater understanding of the processes involved. This activity works best in a large space but can be completed in the classroom if necessary. Ask the class to stand up. Split the class into four groups. Explain to the pupils that they are going to be one of three molecules. One group will be the carbon molecules, one group will be the iron molecules and the final two groups will be the oxygen molecules (there needs to be more oxygen molecules than iron or carbon). Each group needs to be identifiable, so give each pupil a sticky label with the name of their molecule written on it. Move the tables and chairs to make a space in the classroom (or if the weather is nice take the pupils outside). Mark a space in the room and explain this is the furnace.*  *Ask the carbon molecules to stand at the bottom of the space:* ***these pupils represent the carbon contained within the charcoal which is released during combustion (fire).*** *Ask the oxygen molecules to spread themselves out in the furnace. Tell the pupils that you are going to light the furnace and let the carbon molecules (a few at a time) enter the furnace, link arms with two oxygens and leave via the top of the furnace (****these are carbon dioxide CO2****). If there are not enough oxygen molecules for two each, some carbon molecules may only be able to link with one oxygen molecule before they leave via the top of the furnace (****these are carbon monoxide CO****). Explain that this is what happens during normal combustion in the furnace. The carbon reacts with the oxygen and carbon dioxide released. If there is not enough oxygen during combustion then carbon monoxide is produced (this happens when the burning process is not complete and altering the levels of oxygen in the furnace alters the amount of carbon monoxide that is produced).*  *Repeat the set up above, only this time have some oxygen molecules link arms with an iron molecule. Tell the class that these pairs represent* ***iron ore*** *and ask them to stand at the top of the furnace.**Now there should be fewer oxygen molecules in the furnace. Explain that the smiths will reduce the oxygen in the furnace to allow the iron ore to smelt. Ask the iron ore to enter the furnace. Now slowly release the carbon molecules who, once again, need to find two oxygen molecules. This time however, they can take them from the furnace or from the iron ore, leaving only iron molecules behind. When they have found two oxygen molecules they can leave the furnace as* ***carbon dioxide.*** *When an iron molecule has lost their oxygen partner they can float to the bottom of the furnace. Again if there are not enough oxygen molecules for the carbon they can take one oxygen molecule and leave as* ***carbon monoxide.*** *Any iron molecules still holding their oxygen when all the carbon has left are still iron ore.* | | |
| **Information Sheet** | | |
| * Every object in the loans box has an information sheet that accompanies it. * This activity is included in each object lesson. * Different ways of working through the information has been detailed below in the teaching notes section. Choose whichever fits the composition and abilities of your class. | | |
| Hand out the Iron Nails object sheet. Using one of the activity ideas below, have the pupils read the information and share it within their groups. (1)  Once they have shared the information the groups are to create a quiz, poster, presentation, infographic or complete an individual activity based on what they have read. (2)  These are just some suggestions for creating an activity based on the individual objects. Feel free to alter the activities however you wish. For example you could have the class produce a piece of writing, a piece of art work or take part in a debate. This lesson is a brief look at the object and will hopefully stimulate further learning and discussion. | | |

|  |  |  |
| --- | --- | --- |
| **Plenary** | | **5 minutes** |
| **Two Things I Learned** (5 minutes) | Resources: None | |
| * This plenary is an easy way to have pupils reflect on the things they have learnt during the lesson. | | |
| As *a think-pair-share* exercise, ask the class ***What two things did you learn during this lesson?***Share their answers with their partner.  Form the pairs into small groups and have each pair share their answers with the other members of the group.  Finally ask for volunteers to share their answers with the class and see how many different things the class can come up with. | | |

|  |
| --- |
| **Additional Teaching Notes** |
| **(1) Co-operative learning techniques for sharing the information** |
| Below are a series of different methods for having pupils share written information. Simply choose one that you feel will work most effectively with your class. Or use a different technique of your preference.  All of these techniques require mixed ability groups but ensure that pupils who struggle to read can be supported by their peers, classroom or pupil support assistants or their class teacher.   1. Number the pupils within their small groups. Divide the text into sections equal in number to the members of the group. For example, if you have groups of four (avoid using bigger groups if possible) divide the text into four sections. Spread the sections around the room. Send the number ones from each group to one section, the number twos to the next section and so on. Allow the pupils time to read their section (or have it read to them if you have any reluctant or struggling readers in the class). If you make sure the pupils who struggle with reading all have the same number within their group it is easier to differentiate the task. Once the pupils have read their section they return to their group and summarise what they have read. 2. Number the pupils within their small groups. Split the writing into sections (equal to the number of pupils within each group). Give each pupil a section of the information in order; number ones should have the first section of information. Number one reads out their information, number two then summarises the text. Number two then reads their section and number three summarises the information and so on. 3. This activity is similar to the first example activity, however it makes use of a graffiti board (a piece of paper split into sections equal in number to the number of pupils in the groups) to share the information. Organise the class in the same way as the first activity in this list. When the class are reading their section they are to try to memorise the important information in the passage; once they have memorised their section they are to stand. Once everyone is standing return the pupils to their home group. When they arrive they are to record the key information on the graffiti board.   These are just three examples of some co-operative style reading activities. However, the information can be shared whichever way you like. It can be incorporated into a guided or shared reading exercise, a comprehension exercise or simply an individual activity. The above are only intended to be ideas for sharing the information quickly and efficiently in a busy classroom. |
| (2) **Activities using the information.** |
| Below are a series of activities making use of the information learned during the lessons.  **Quiz**  Each person is to come up with one question (meaning each group will have at least four questions) and make sure they write the answer down as well.  When the groups have created their questions collate them into a whole class quiz. With the pupils working in their groups, run the quiz. Keep a note of which questions came from which group as they aren’t allowed to answer their own.  **Poster**  This activity can be completed in a number of ways but when working as a group it is important that each pupil is given a responsibility. That can either be through their role or by splitting the poster into sections.  If using roles each pupil needs a specific responsibility within the group. These could be the following:   * Materials Manager - the pupil who fetches the different materials the group needs, therefore the only one out of their seat at any one time (handy for reducing pupil movement around the classroom on an activity like this). * Time Keeper - the pupil who keeps an eye on the time and ensures the job is completed. * Copy Manager - the pupil who has responsibility for spelling and proofing of all the text on the poster. * Jobs Manager - the pupil who ensures that the entire group has something to work on as well as their assigned responsibilities. This pupil also makes the final decision if there is a disagreement.   These jobs are just examples. You can use whatever you feel will work with your class as long as every pupil has a role within their group.  If splitting the poster into sections, the best method is to divide a large piece of paper into four and have each pupil work on their own section. You can also use different colours of paper that are then combined for a final product. This method has some benefits, as it is easy to see which pupil has completed the work and who has struggled or opted out of the activity. However, rather than a group piece it is a more individual task. Choose whichever method you feel will benefit your class.  **Presentation**  Similar to the poster above, the only difference being the presentation is shown to the class and usually (but not always) has an ICT component to it.  Again similar to the poster above, it is important to make sure each pupil has a role within the group. Either give them a personal responsibility within the group (such as the suggestions above) or give them sole responsibility for a section of the presentation based on the information they have read.  How you run the activity is up to you. However, it is worth setting a rule that pupils are not allowed to read information from their presentation (through whatever medium that turns out to be). Otherwise pupils have a tendency to copy text onto their presentation and simply read it out loud.  **Infographic**  An infographic is similar to a poster but relies much more on images to convey the information. This can be difficult for pupils who aren’t familiar with creating these types of texts as they require a certain style. One of the best ways to encourage creative use of images is to impose a word limit, which alters depending on the amount and type of information being presented. Between one and two hundred words is a sensible limit. Secondly, have the pupils create a central image that represents the whole piece and branching images derived from that key picture.  In terms of classroom organisation, it is similar to the poster above. Ensure each pupil has an area of responsibility, either through their role within the group or through what sections they are completing on the work. An infographic gives the opportunity for creative and artistic pupils to focus on a central image while others work on the surrounding images or text.  **Additional Ideas:**  Below is a large range of ideas which the pupils can complete following these lessons. Some are individual and some are group-based tasks:   * Write a story/diary entry about the object studied. * Design a “manual” for the object (i.e. how it is made, what it is made of, what it was used for). * Answer long format interpretive questions about the object. This is a precursor to essay writing and an opportunity to use four part paragraphs. For example, they could discuss ‘What benefits did the barbed and tanged arrowhead provide over the leaf shaped arrowhead?’ * Complete further research and share their findings with their group or the whole class. * Hot seating. A pupil confident with the information takes on the role of a person living in the past and answers questions posed by the class (you can take on this role as well). * Questions and answers. Collate any questions the class has about what they have learnt in the lesson. Pose those questions to other pupils and have them research and then feedback any possible answers. This sometimes requires the questions to be “rewritten” to make them more accessible for the whole class. * Crafting sessions. In some cases it is possible to try and replicate the crafts on show, such as with the carved stone ball or the pottery. However, they are often long processes and the results will vary. ***Additionally it is important to note that all crafting activities related to the objects in the boxes require proper protective equipment and a full consideration of the risks involved.*** |
| **Links and Further Information** |
| Further information regarding the different crafting workshops delivered by ARCH, through which all the objects were sourced for the boxes, can be found at the following link. You will find an edited version of a video for each workshop and a blog post which has links to videos, images, books and other resources. A worthwhile resource if you, or the pupils in you class, wish to learn more.  ARCH Experimental Archaeology Project: <http://www.archhighland.org.uk/experimental-archaeology.asp>  Other videos mentioned in the lessons:  Blacksmithing - Iron Smelting and Forging a Poor Bloomvideo [2:42]  https://www.youtube.com/watch?v=gPf08sFpNXA |

This Lesson Plan was written by Dave Peers as part of the Experimental Archaeology: Learning about Craft and Technology in the Past project, funded by Historic Environment Scotland and the Heritage Lottery Fund (now National Lottery Heritage Fund). ©ARCH.