

Mathematics Mastery

# Year 1 Unit 6: Time

### Lesson 1: Months of the year

Key Learning: To know and order the months of the year. Lesson Overview: Pupils order the months of the year. Resources: Class birthday calendar, Task sheet pre-cut into strips, glue, months of the year resource. Transitions: Days of the week, ordinal numbers (first, second etc.)	
Witing the numbers 0-20 in order starting of 0         8         4         15           7         3         18         1           6         2         13         5         11           14         12         9         17         20           19         16         10         0000	<b>Do Now</b> Pupils write the numbers 0 to 20 in order.
Image: Second	<ul> <li>New Learning: Ordering the months of the year</li> <li>Ask some questions about the months. Count the months and model the language.</li> <li>The first month is January. The second month is February</li> <li>This is good practice for using ordinal numbers in context. Use the months of the year resource to order the months visually in a circle around the room. Discuss this layout with pupils to establish that the year is a cycle and that after December comes January. Ask pupils to stand by their birth month and then talk about this in sentences.</li> <li>I was born in March. The month before March is February. The month after March is April. Discuss the pictures on the months of the year resource cards, as some pupils may not know how these link to the months.</li> </ul>
December duel Lonoror, Robusy May August. September December, Lwitt	Talk Task: December duel!Pupil A and B take it in turns to say either one or two months of the year in order. The person to say December is the winner! You could also change the target month, so that pupils practise beginning the cycle at January again after December.
End of the year	<b>Develop Learning</b> : <i>End of the year</i> Get pupils to close their eyes while you cover one of the months on the slide. Ask pupils which months is missing and to explain how they know. Then use the Develop Learning to discuss the end of the year in our calendar. Discuss December traditions, school events, New Year celebrations (you could show a video of Big Ben chiming and the London fireworks) and how they mark the beginning of the new year and the arrival of January. Discuss the change of the year, what the previous year was called and what the new current year is called.
Key learning. To know and acter the monith of the year Weight of the standard sta Standard standard	<ul> <li>Independent Task</li> <li>Pupils have the Task sheet cut into strips and some glue. They make a paper chain, attaching the months of the year in order. Once they have made a linear chain from January to December, they link December to January to represent the cycle.</li> <li>Possible adaptations: <ul> <li>Pupils could make their own paper chains, writing the months of the year themselves.</li> <li>Pupils could write the ordinal numbers onto the months.</li> </ul> </li> </ul>
Knowing and ordering the months of the year	<ul> <li>Plenary Using the calendar, or the months displayed around the room, ask questions about when the months come within the year, e.g. which is the fourth/seventh month of the year? Get a pupil to come to the front of the class and give clues about their birth month for others to guess:</li> <li>It is the month before</li> <li>it is the [sixth] month of the year.</li> </ul>



### Lesson 2: Sequencing events

<b>Key Learning:</b> To sequence events in time order. <b>Lesson Overview:</b> Pupils discuss the concept of a day and the different parts of a day. They use ordinal language to sequence events in a story and in their own daily routine. <b>Resources:</b> Talk Task sheet cut into sections (one copy per table), Task sheet. <b>Transitions:</b> Number bonds to seven, months of the year.	
Writing the months of the year in order     Image: Constraint of the year in order       July     April       February     October       September     March       June     May       December     January	<b>Do Now</b> Pupils write the months of the year in order.
Understanding a day What ha day? Mont ha day? Mont ha day? Mont ha day? Mont happens in a day?	<ul> <li>New Learning: Understanding a day</li> <li>Get pupils into a circle to discuss what a 'day' is.</li> <li>What is a day? What happens in a day?</li> <li>What might happen later on today?</li> <li>Establish that we can split the day up into sections called morning, afternoon and evening. Ensure pupils understand that morning is from the start of the day until midday (12 o'clock, noon) and that afternoon begins at midday. Discuss when pupils think evening begins. This will be based on their cultural time markers, e.g. how they refer to the evening at home, as well as events in their daily routine, e.g. dinner time, bath time. Establish that it might begin around dinner time and that they go to bed in the evening.</li> <li>In the Talk Task, pupils order to story of Little Red Riding Hood. This could be done without preparation, encouraging pupils to think about the order events might happen in, or you could discuss the story at this point.</li> </ul>
Creating a story Creating a s	Talk Task: Ordering a storyPupils have the Big Picture cut up into sections. In groups they order the pictures by retelling (or making up) the story. Encourage pupils to focus on using the star words and to speak in full sentences. (Keep the images for the Do Now in Lesson 4.)
Ordering events in a day What do you do in the marring?	<ul> <li>Develop Learning: Ordering events in a day</li> <li>Take feedback from the Talk Task, encouraging the use of star words. Introduce the Unit 6 Big Picture and explain it tells the story of Little Red Riding Hood's morning.</li> <li>What does she do first? What next?</li> <li>What do you do in the morning?</li> <li>Take ideas from pupils and write them in no particular order on the board.</li> <li>Do you do them in that order? Which do you do first?</li> <li>Use pupils' suggestions to form model sentences with the star words.</li> <li>If there is time, you might like to discuss afternoon and evening activities and their order too.</li> </ul>
Representation     Find     Permeter       Parting     Find     Permeter       Autor     Endore     Autor       Autor     Endore     Mater       Control     Endore     Mater	<ul> <li>Independent Task</li> <li>Pupils have the cut-up pictures from the Task sheet. They order them and stick them to form a comic strip (using the frame provided if preferred). They write sentences next to the pictures using the star words, e.g. First I, Next I</li> <li>Possible adaptations: <ul> <li>Pupils could draw their own cartoons for the whole day.</li> <li>Pupils could have a comic strip with some events already ordered.</li> </ul> </li> </ul>
Silly stoles First ate my breakfast, then I woke up	<ul> <li>Plenary: Silly stories</li> <li>Pupils tell each other 'silly stories' where the routine is out of order.</li> <li>First I brushed my teeth and then I got out of bed.</li> <li>Choose pupils to share their stories with the class.</li> </ul>



#### Lesson 3: Minutes and seconds

<b>Key Learning:</b> To understand that time can be measured in minutes and seconds. <b>Lesson Overview:</b> Pupils explore the concept of a minute, learning that it is 60 seconds. They estimate whether activities are shorter or longer than one minute, as well as how many repetitions of an activity can be done in 20 seconds. <b>Resources:</b> Analogue wall clock with a second hand (or IWB clock), timer/stopwatch, Talk Task sheets, Task sheet. <b>Transitions:</b> Skip counting in fives, number bonds to nine.	
Understanding that time can be measured in minutes and seconds Group that of the week tops and weekend. Now put al of the days in order. Nidey Investory Manday Sahaday Thunday Sanday	<b>Do Now</b> Pupils have the days of the week resource cut into strips. They organise the days into two groups: weekdays and weekend days. They then order the days of the week and practise using ordinal language, e.g. the first day of the week is Monday. The second day
What is a minute? What is a minute? What is a minute? Minute is a minute is a min	New Learning: what is a minute? Begin by asking pupils what they think a minute is and gather their ideas. Show pupils either an analogue wall clock with a second hand or a virtual clock such as: https://www.visnos.com/demos/clock. Discuss the three hands and see if pupils know what they show. Draw attention to the fastest moving hand, the second hand, and explain that when it moves all the way around the clock once, that is one minute. See if pupils know how many seconds are in one minute. Get them to clap in time with the second hand for one minute. Establish that they have clapped 60 times. Discuss activities which would last longer or shorter than one minute, e.g. playtime, writing your name, running a lap of the playground. You may like to watch this video: https://www.bbc.co.uk/teach/class-clips-video/how-long-is-a- minute/zfk3cqt
Longer or shorter than one minute? Storter than a minute Longer	<ul> <li>Talk Task: <i>longer or shorter than one minute?</i></li> <li>Pupils work in groups of three or four to sort the images into activities which take longer or shorter than one minute. Model asking questions and answering in full sentences:</li> <li>How long do you think it takes to bake a cake?</li> <li>I think it takes longer than one minute.'</li> </ul>
Understanding seconds The many seconds are fitter in one minute? The many seconds in one minute? The many set of program one of a program are as accords in one minute? The many set of program one of a program are as a counter of a program ar	<ul> <li>Develop Learning: understanding seconds</li> <li>Take some feedback from the Talk Task and repeat that there are 60 seconds in one minute. Now look at the duration of 10 seconds. Get pupils to predict how many star jumps they can do in 10 seconds. Pupil A does as many star jumps as they can, Pupil B counts and you time 10 seconds, then swap roles.</li> <li>If you can do X number of star jumps in 10 seconds, how many do you think you could do in 20 seconds?</li> <li>Take feedback and encourage pupils to explain their reasoning.</li> </ul>
Reventing to understand that time can be measured in instructes and execution.	<ul> <li>Independent Task</li> <li>Pupils take it in turns to count how many repeats of the activities on the Task sheet they can do in 20 seconds. Pupil A does the activity while Pupil B counts, then they swap roles. The teacher uses a timer on the IWB to time 20 seconds.</li> <li>Possible adaptations: <ul> <li>Pupils could have one stopwatch between two to time 20 seconds themselves.</li> <li>Pupils could use a bead string to count the number of times an activity happens, moving one bead to mark each instance.</li> </ul> </li> </ul>
True or false?	<b>Plenary:</b> <i>true or false</i> Give pupils statements and have them discuss whether they are true or false.



Mathematics Mastery

# Year 1 Unit 6: Time

### Lesson 4: O'clock time on an analogue clock

<ul> <li>Key Learning: To read and write the time to o'clock on an analogue clock.</li> <li>Lesson Overview: Pupils learn to read o'clock times on an analogue clock, explaining how they know it is a given time.</li> <li>They draw hands on a clock face to show o'clock times.</li> <li>Resources: Large geared demonstration clock, individual geared clocks, Task sheet.</li> <li>Transitions: Days of the week song, chanting ordinal numbers from 'tenth' backwards.</li> </ul>		
Reading the time to o'clock on an analogue clock	<b>Do Now</b> Each table has a copy of the Big Picture cut into parts (from the Lesson 2 Talk Task). They order the story of Little Red Riding Hood, using the language on the slide.	
	<ul> <li>New Learning: introducing o'clock</li> <li>Draw attention to the clock in each section of the Big Picture story and the fact that they are all different. Discuss how analogue clocks often have three hands and what these all show. Using a large demonstration clock, show pupils eight o'clock.</li> <li>Explain that the short hand is the hour hand and it points to the hour numbers written around the clock to tell us what hour it is. The hour hand is pointing to the eight.</li> <li>Explain that the long hand is the minute hand. It moves faster than the hour hand and tells us how many minutes into each hour we are. When the minute hand is pointing straight up, it is o'clock. So the clock shows eight o'clock.</li> <li>Avoid saying 'when the minute hand is pointing to the 12'. The minute hand actually points to the minute scale, which is often unnumbered, though may be numbered 1–60 on a demonstration clock. Confusion often arises from pupils thinking the minute hand is pointing to the hour scale.</li> <li>Show other o'clock times, model and get them to discuss what time the clock shows.</li> <li>The clock shows six o'clock because the hour hand is pointing to the six and the minute hand is pointing to the six and the minute hand is pointing to the six and the minute hand is pointing straight up.</li> </ul>	
What's the o'clock time?	<b>Talk Task:</b> <i>what's the o'clock time?</i> Pupils each have a small geared clock. Pupil A makes an o'clock time and Pupil B says what the time is and explains how they know. Pupils swap roles.	
Drowing hands on a clock	<b>Develop Learning</b> : <i>drawing hands on a clock</i> Pupils have their individual clocks on the carpet. Based on your assessment during the Talk Task, practise more reading of o'clock times, always requiring pupils to explain how they know what the time is. Then show pupils a time written in words with a blank clock face. Discuss how to represent the time on the clock, drawing attention to the minute hand being quite a lot longer than the hour hand.	
Image: Second of white the to of clack an analogue clack       Image: Second of white the tor of clack an analogue clack       Image: Second of white the tor of clack an analogue clack       Image: Second of white the tor of clack an analogue clack       Image: Second of white the tor of clack an analogue clack       Image: Second of white the tor of clack an analogue clack       Image: Second of white the tor of clack an analogue clack       Image: Second of white the tor of clack and analogue clack       Image: Second of white the tor of clack and analogue clack       Image: Second of white the tor of clack and analogue clack       Image: Second of white the tor of clack and analogue clack       Image: Second of white the tor of clack and analogue clack       Image: Second of white the tor of clack and analogue clack       Image: Second of white tor of clack and analogue clack       Image: Second of white the tor of clack and analogue clack       Image: Second of white tor of clack and analogue clack       Image: Second of the tor of clack and analogue clack       Image: Second of tor of clack and analogue clack and analog	<ul> <li>Independent Task</li> <li>Pupils have a copy of the Task sheet. They complete the missing information, either by writing the times in words, or drawing the hands on the clocks.</li> <li>Possible adaptations: <ul> <li>The task could be presented as a card sort, with pupils matching written and clock times.</li> <li>Pupils could be given some times written in words for them to make on a geared clock.</li> </ul> </li> </ul>	
Motch the witten times to the clocks     Image: Clock to the clock to	Plenary Pupils match the written times to the clocks.	



### Lesson 5: Half past on an analogue clock

<b>Key Learning:</b> To read and write the time to half past on an analogue clock. <b>Lesson Overview:</b> Pupils discuss o'clock and half past. They read half past and draw hands on a clock face to show half past.	
	lemonstration clock, individual geared clocks, Talk Task sheet, Task sheet. year, saying one more than a number within 10.
Reading the time to half past on an analogue clock	<b>Do Now</b> Partners take it in turn to say the months of the year in order. Each partner can choose to say either one or two months. The winner is the person who says December.
Introducing half pair       Image: A state of the same? What a different?	<ul> <li>New Learning: introducing half past</li> <li>Show pupils the two scenes from the Big Picture and ask "what's the same and what's different?" If necessary, ask "what's the same and what's different about the hour and minute hands on the clocks?"</li> <li>In one, the hour hand is pointing straight to the hour and the minute hand is pointing straight up. In the other, the hour hand is halfway between two hours and the minute hand is pointing straight down.</li> <li>Use a large demonstration clock to make seven o'clock and then move the minute hand to half past seven. Explain that this shows half past and discuss how the hands have moved. Remember to describe the minute hand as pointing down, rather than pointing to the six, as the minute hand is pointing to the minute scale.</li> <li>Show other half past times and have pupils discuss the time and explain how they know.</li> </ul>
What's the time?	<b>Talk Task:</b> <i>what's the time?</i> Pupils have the Talk Task sheet. Pupil A picks a clock and says what the time is, explaining how they know. Pupil B checks whether they agree or disagree and says why. Pupils swap roles. This could be done with geared clocks instead; however, the sheet ensures pupils are definitely using accurate representations of half past and allows their attention to be focused on describing the position of the hands.
Hands on a clock	<ul> <li>Develop Learning: addressing misconceptions about hands</li> <li>Use the slide, or better still a large demonstration clock to show 10 minutes to six.</li> <li>This clock shows half past ten. Do you agree or disagree? Discuss.</li> <li>Take feedback, requiring pupils to explain their ideas. Establish that the hour hand is pointing straight down and the minute hand it pointing to the ten and if it were half past ten, they would be the other way around.</li> <li>Repeat some more similar 'hand swapping' examples and try to catch pupils out. For example:</li> <li>half past 4 or 25 minutes past 6</li> <li>half past 12 or 6 o'clock</li> <li>half past 2 or 10 minutes past 6</li> <li>half past 9 or quarter to 6.</li> </ul>
Kar Jerration     Second work whether the hold paid on on ondorport control       Weight on the paid o	<ul> <li>Independent Task</li> <li>Pupils have a copy of the Task sheet. They complete the missing information, either by writing the times in words, or drawing the hands on the clocks.</li> <li>Possible adaptations: <ul> <li>The task could be presented as a card sort, with pupils matching written and clock times.</li> <li>Pupils could be given some half past times written in words for them to make on a geared clock.</li> </ul> </li> </ul>
Match the written times to the clocks	<b>Plenary</b> Pupils match a mixture of o'clock and half past written times to the clocks.



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# Year 1 Unit 6: Time

### Lesson 6: O'clock and half past

<ul> <li>Key Learning: To read the time to o'clock and half past on an analogue clock.</li> <li>Lesson Overview: Pupils review reading an analogue clock to o'clock and half past. They link this to typical morning and afternoon activities and the times when these might happen.</li> <li>Resources: Large geared demonstration clock, individual geared clocks, Talk Task sheet, Task sheet.</li> <li>Transitions: Number bonds to five, counting forward in ones from 0 to 20.</li> </ul>	
Reading the time to o'clock and half past on an analogue clock five o'clock nine o'clock seven o'clock three o'clock ten o'clock eleven o'clock four o'clock eight o'clock	<ul> <li>Do Now</li> <li>Pupils have individual geared clocks. In pairs, they choose a time and make it on their clock and explain to each other how they know they are correct.</li> <li>I know it is ten o'clock because the hour hand is pointing to the ten and the minute hand is pointing straight up.</li> </ul>
How to tell the lime What can you remember about telling the lime? More about telling the lime?	<b>New Learning:</b> <i>Recapping how to tell the time</i> Have the large demonstration clock and give each pupil a small geared clock. Get pupils to recall everything they have learnt about telling the time so far, using their clocks to exemplify. Play a game of 'What's the time, Mr Wolf?' Give pupils clues (for example, the hour hand is between the one and two and the minute hand is pointing straight down) and have them guess the time, using their individual clocks for support. This can be used as an opportunity to address any misconception, e.g. confusion between the minute and hour hands.
O'clock and half pot	<b>Talk Task:</b> <i>O'clock and half past</i> Pupils have a copy of the Talk Task sheet and individual geared clocks. Pupil A picks a clock from the sheet and makes the same time on their personal clock. Pupil B reads the time from the clock, explaining how they know. They cross that clock off on their sheet and swap roles.
Morning and afternoon activities	<b>Develop Learning</b> : <i>Morning and afternoon activities</i> Introduces some activities we do in the morning, afternoon and evening. Discuss the meaning of the word 'noon' and establish that 12 o'clock is midday, and the after <b>noon</b> comes after it. Establish that morning is until 12 o'clock and afternoon is after 12 o'clock. You might want to also discuss that there are two 12 o'clocks each day, midday and midnight, and that pupils will be asleep at midnight. Discuss the times when the activities might happen, e.g. eating breakfast at seven o'clock in the morning. Add to the examples with activities from pupils' daily routines, emphasising morning, afternoon and evening and the times when activities might happen.
Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and hold part on an analogue.       Image: Second tractices to or close, and tractices to or close,	<ul> <li>Independent Task</li> <li>Pupils have a copy of the Task sheet. They suggest times when each activity might occur and draw the hands on the clock.</li> <li>Possible adaptations: <ul> <li>Pupils could have the time and words completed for them to match to the activities.</li> <li>Pupils could think of their own daily activities and write their o'clock or half past times.</li> </ul> </li> </ul>
Missing minute hand Look carefully of the clocks. What do you notice? What the do you think it is? Now can you tell?	<b>Plenary:</b> <i>Missing minute hand</i> Display the four clocks, which are all missing their minute hands. Discuss whether it is possible to tell the time from only the hour hand. Encourage pupils to explain their ideas.



### Lesson 7: O'clock and half past

<ul> <li>Key Learning: To read and write o'clock and half past times in words.</li> <li>Lesson Overview: Pupils write sentences to describe times. They read the time in words and show it on a clock. They then suggest activities which might be completed at that time.</li> <li>Resources: large geared demonstration clock, individual geared clocks, Talk Task sheet cut into individual cards, Task sheet.</li> <li>Transitions: Number bonds to six, counting backwards in ones from 20 to 0.</li> </ul>	
Ordering the months of the year         Image: Constraint of June.           Write the months in order starting of June.         June           June         October         February           March         May         September           August         July         January           November         December         April	<ul> <li>Do Now</li> <li>Pupils order the months of the year, starting from June. If they are confident in this, they can ask each other questions.</li> <li>Which month comes before January? Which month comes after April?</li> </ul>
Writing the time in a sentence What is my sentence? In project to be done in project to be done of the time? What is my sentence? What is my sentenc	<b>New Learning:</b> <i>writing the time in a sentence</i> Display the words 'four, is, time, o'clock' the' as on slide three. Ask pupils to think about what sentence could be made with these words. Let pupils discuss and take their ideas down, then write the sentence 'The time is four o'clock'. Get pupils to make this time on their individual clocks and ask them what they might be doing at four o'clock in the afternoon. Repeat with a 'half past' time.
Times and activities	Talk Task: <i>times and activities</i> Pupils have a cut-up copy of the Talk Task sheet. Pupils take it in turns to pick a time, make it on their individual clocks and say something they might do at that time.
Willing the time in words	<ul> <li>Develop Learning: writing the time in words</li> <li>Make a list of some daily activities (some examples are given on slide six). Discuss each in turn and establish a time when this might happen.</li> <li>What sentence could I write to show this time?</li> <li>Use the sentence starter 'The time is' and display the vocabulary to use (ideally on a permanent display for pupils to refer to). Model a sentence first and then pupils can work in pairs to write a sentence together on their mini whiteboards. Repeat multiple examples, including o'clock and half past examples.</li> </ul>
Explaning:     to easily output to 2 close, closed barg bare that is a version.       Barbon     Barbon	<ul> <li>Independent Task</li> <li>Pupils have a copy of the Task sheet. They read the time on the clock face and complete the sentences.</li> <li>Possible adaptations: <ul> <li>Pupils who are less confident writers could be given cut up words to order into sentences.</li> <li>Pupils could choose their own activities and their own times.</li> </ul> </li> </ul>
What did hey do when?	<b>Plenary:</b> <i>What did they do when?</i> Look at the Big Picture together. Read each question in turn (or get pupils to help read them) and give pupils a chance to discuss and share feedback as a class.



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# Year 1 Unit 6: Time

### Lesson 8: Time problems

<ul> <li>Key Learning: to explore adding on hours and half hours.</li> <li>Lesson Overview: Pupils look at what happens to a clock's hands as one hour passes. They add one hour or half an hour onto an o'clock or half past time.</li> <li>Resources: large geared demonstration clock, individual geared clocks, one die for each pair.</li> <li>Transitions: skip counting in fives, months of the year.</li> </ul>	
Adding on hours and half hours $ \begin{pmatrix} \mathbf{u} & \mathbf{u} & \mathbf{u} \\ \mathbf{v} & \mathbf{v} & \mathbf{v} \\ \mathbf{v} & \mathbf{v} & $	<b>Do Now</b> Pupils look at the clock faces and write each time in words on a mini whiteboard.
Adding one hour	<ul> <li>New Learning: Adding one hour</li> <li>Begin with the context of an analogue clock (e.g. the class wall clock) stopping because its batteries have run out. Tell pupils it stopped one hour ago.</li> <li>If the clock stopped one hour ago, what time must it be now?</li> <li>Give pupils chance to discuss and take their ideas. They may find it helpful to have individual clocks so that they can make the time shown and then move it forward one hour.</li> <li>Discuss and establish that in one hour, the minute hand moves around the clock once and the hour hand moves from one number to the next.</li> <li>Show the Big Picture and tell pupils all of the clocks/watches stopped one hour ago.</li> <li>What time is it really in each picture?</li> <li>Be sure to discuss both o'clock and half past times.</li> </ul>
Adding one hour	<b>Talk Task:</b> <i>Adding one hour</i> Pupil A makes an o'clock or half past time on their clock. Pupil B makes the same time on their clock and then moves the time on to show one hour later. They explain how the clock has changed. Pupils swap roles.
Stop the clock game	<ul> <li>Develop Learning: Stop the clock game</li> <li>Return to the Big Picture and explain that this time we will add half an hour onto the times.</li> <li>Model an example and ask pupils to pay attention to what happens to the hands of the clock.</li> <li>The minute hand moves from pointing straight up to straight down (or vice versa). The hour hand moves from being on the number to being halfway between two numbers (or vice versa).</li> <li>Work through multiple examples, getting pupils to visualise and describe to each other what will happen when you move the clock forward half an hour.</li> <li>Introduce the Independent Task game, 'stop the clock' and model playing it with another adult or pupil.</li> </ul>
Available       State Stat	<ul> <li>Independent Task Pupils share one clock between two. They start at 12 o'clock and take it in turns to move the time forward by one hour or half an hour. They roll a die. If they roll a one, two or three, they move the time forward by one hour. If they roll a four, five or six they move the time forward by half an hour. They say the new time on each turn. The winner is the person to reach 12 o'clock (or go past 12 o'clock).</li> <li>Possible adaptations: <ul> <li>Pupils play alternating rounds. In the first round, they take it in turns to choose to move the time on by one hour or two hours (similar to the months game from Lesson one) and in the second round they choose to move the time on by one or two half hours.</li> <li>Pupils add on hour increments according to the die, e.g. a roll of three adds on three hours.</li> </ul> </li> </ul>
Reading a clack with some numbers mising with the source of the source	<b>Plenary:</b> <i>Concept cartoon</i> Show pupils the cartoon on the slide and read out the children's statements. Give pupils a chance to discuss. Is it possible to read a clock when some of the numbers are missing?



#### Lesson 9: Position, direction and movement

Key Learning: to use the language of position, direction and movement. Lesson Overview: Pupils practise making whole, half and quarter turns to the left and right. They use the language 'clockwise' and 'anti-clockwise' to describe this. They follow instructions to rotate shapes (arrows) through given turns clockwise and anti-clockwise. Resources: large geared demonstration clock, Granny's bedroom printable resources, Task sheet, four cut out arrows per pupil, glue. Transitions: number bonds to eight, days of the week song. Do Now Can pupils remember how many seconds there are in one minute? Display the clock and ask pupils to clap every second until it has done a full turn around the clock. New Learning: Introducing half and whole turns ing half and whole turn Before the lesson, print the resources Granny's bed, chair, chest of drawers and window and stick Granny's bed and chair on opposite walls as reference points for turns. You might like to start the lesson by showing the Big Picture, retelling the story of Little Red Riding Hood (practising sequencing vocabulary) and then tell pupils they are doing to pretend to be Granny. Using the pictures as reference points, get pupils to stand up and turn a whole turn to the right and then to the left. Practise some more turns, testing pupils on left and right. Does it make a difference whether we turn a whole turn to the left or to the right? ? Now introduce a half turn, using the pictures as reference points (e.g. turn a half turn to face the chair). Practise some half turns left and right. ? Does it make a difference whether we turn a half turn to the left or to the right? Place a large demonstration clock on the floor (where it is clearly visible to all) with the minute hand pointing straight up and move it a half turn to face straight down, asking pupils to think about the minute hand and how it is now facing the opposite direction. Draw attention to the fact that we call this time 'half past' and that the minute hand has done a 'half turn'. Talk Task: 'Simon says' Pupils play 'Simon Says' in pairs. Pupil A gives an instruction to Pupil B to turn either a half or whole turn to the left or right. Pupil B completes the action if Pupil A began with 'Simon Says'. Pupils swap roles. Every correctly followed instruction earns a point. Develop Learning: Introducing quarter turns Now stick up the two remaining pictures on the other two opposite walls of the room. Using the pictures as reference points, have pupils stand and turn, e.g. from facing the bed to the window. ? How could we describe this turn? Introduce the term 'quarter turn' and practise more examples to the left and right. Does it make a difference whether we turn a quarter turn to the left or to the right? ? Introduce the terms clockwise and anti-clockwise as alternatives to left and right. Place a wall clock with a second hand on the floor (where it is clearly visible to all) and discuss how the second hand (and all hands) moves to the right, which we call clockwise. Play another game of 'Simon Says' to practise this new language. 0 **Independent Task** Pupils have a copy of the Task sheet and four cut out arrows. They place the arrows on top of the 'starting point' arrows printed on the sheet and follow the instruction describing the movement of the arrow to stick it in its new orientation. Possible adaptations: • Pupils could design a route for Little Red Riding Hood from her house to Granny's house (through the classroom), recording the turns they need to make. • The sheet could be adapted so that all of the printed arrows point upwards. Plenary: Multiple choice Read the questions one at a time. Pupils use the starting point arrow as their reference and choose which arrow answers the question. Pupils could write answers on mini-whiteboards and hold them up. Pupils could be asked to explain their answers.