Maths and Me: Junior Infants – Short-Term Plan, Unit 16: Time 2 (June: Weeks 1&2)

Strand(s) > Strand Unit(s)	Measures > Time.
Learning Outcome(s)	Through appropriately playful and engaging learning experiences children should be able to develop a sense of time and its uses.

Lesson	Focus of Learning (with Elements)	CM	Learning Experiences	Assessment
1	**Understanding the Days of the Week:** Demonstrates understanding of days of the week (U&C); Logically sequences daily and weekly events or stages in stories or real-life situations (R)		C D P Reason & Respond L1–3, 7, 8 P D Notice & Wonder L1, 5, 9 C Mr Wolf's Week L1 C Missing Days L2 C P Sequencing the Days of the Week L2 P Story: *Today is Monday* L3 C Dish of the Day L3 P Story: *Jasper's Beanstalk* L4 C Planting Seeds L4 D C Slow Cats and Fast Mice L5 C 'Measuring' Time L6 C Discovering Sand Timers L6 C Time Collage L7 C My Day L8 C Making a Clock Face L9 **Print resources** Pupil's Book pages 87–92 Home/School Links Book pages 38–39 PCMs 4– 5, 58–59	**Intuitive Assessment:** responding to emerging misconceptions **Planned Interactions:** responding to insights gleaned from children's responses to learning experiences **Assessment Events:** information gathered from completion of the unit assessment in the Progress Assessment Booklet page 29
2	**Sequencing the Days of the Week:** Recalls the sequence of the days of the week (C)			
3	**Personalising the Days of the Week:** Differentiates each day of the week by personalising it (U&C)			
4	**'Long Time' and 'Short Time':** Connects amount of time passing with experience (U&C)			
5	**Experiencing Fast and Slow:** Uses or responds to simple language associated with time (C)			
6	**Measuring Time Passing:** Actively measures time passing, using non-standard measures (e.g. claps, bounces, ticks) (C); Explores different, non-standard devices available to demonstrate time passing (U&C); Considers the duration of tasks (e.g. tidying one's desk, eating one's lunch) (C)			
7	**Time All Around Us:** Begins to recognise that there are standard universal ways of expressing time (C)			
8	**O'Clock Times:** Recognises instruments which tell the time and acknowledges time passing throughout the day (A&PS)			
9	**Exploring the Clock:** Begins to recognise that there are standard universal ways of expressing time (C); Recognises instruments which tell the time and acknowledges time passing throughout the day (A&PS)			
10	**Review and Reflect:** Reviews and reflects on learning (U&C)			

Key: Elements: (U&C) Understanding and Connecting; (C) Communicating; (R) Reasoning; (A&PS) Applying and Problem-Solving. **CM: Cuntas Míosúil:** please tick when you have completed the focus of learning. **Learning Experiences:** C concrete activity; D digital activity; P activity based on printed materials, followed by lesson numbers.

Additional information for planning

Progression Continua	See 'Junior Infants *Maths and Me* Progression Continua Overview' for a detailed breakdown of how all progression continua are covered.
Maths Language	See 'Junior Infants *Maths and Me* Language Overview', individual lesson plans and Unit 16 Maths Language Cards.
Equipment	See 'Junior Infants *Maths and Me* Equipment Overview' and individual lesson plans.
Inclusive Practices	• See Let's Strengthen and Let's Deepen suggestions throughout lesson plans. • See Unit 16 Let's Strengthen Suggestions for Teachers. (These address the Common Misconceptions and Difficulties listed below.) • See Unit 16 Let's Strengthen PCM. • See Unit 16 Let's Deepen PCM.
Integration	See individual lesson plans.

Background and rationale

- The days of the week form the first part of this unit. Before learning the sequence of the days, the children need to form a basic understanding of what the sequence means.
- Linked to their understanding of the sequence of the days of the week is the abstract concept of time passing. The story of *Jasper's Beanstalk* illustrates this in an accessible way, as Jasper spends each day of the week waiting for his seeds to grow. This leads to two different aspects of time: actions that take a long time to complete and actions that take a short time to complete. The children explore their experiences of 'fast' and 'slow', and what these terms mean with regard to time passing.
- The children are guided towards discovering that time needs to be measured in a standard way to be fair. Some children will realise that using non-standard methods, such as clapping, to time an activity may not be fair, or that a sand timer will not tell us when it is lunchtime. Using their Maths Eyes, the children's attention is drawn to 'time all around us': clocks, watches, time apps, etc. The children begin to realise the role that these devices play in their day.
- The story *What's the Time, Mr Wolf?* provides a gentle introduction to o'clock times through the sequence of Mr Wolf's day. The children explore o'clock times by creating their own clock face, sequencing the numbers, and using the little hand to 'tell' the time.

The theme for this unit is **Time All Around Us**.

Common misconceptions and difficulties

- The children may not grasp the linear nature of time, as it is an abstract concept.
- They may find it difficult to sequence events, particularly regular events.
- They may not be able to recall the sequence of familiar units of time, such as the days of the week.
- They may confuse language such as: *before* and *after*; *quicker* and *slower*; *earlier* and *later*.

The Unit 16 Let's Strengthen Suggestions for Teachers address the common misconceptions and difficulties listed above.

Mathematical models and representations

- Sand timers
- Classroom clock

Sand timer

Teaching tip

A teaching clock manipulative printable is available to support this unit. Click on the resources icon on the **edcolearning.ie**

Day 1, Lesson 1

Understanding the Days of the Week

Focus of learning (with Elements)

- Demonstrates understanding of days of the week (U&C)
- Logically sequences daily and weekly events or stages in stories or real-life situations (R)

Learning experiences

- C Class discussion: Days of the Week
  ***MAM* Routine: Reason & Respond**
- P Story: *Mr Wolf's Week* by Colin Hawkins
  ***MAM* Routine: Notice & Wonder**
- C Concrete activity: Mr Wolf's Week

Equipment

- Picture book: *Mr Wolf's Week* by Colin Hawkins
- Unit 16 Maths Language Cards
- Play dough
- Play Area props
- Paints and/or crayons
- Class clothesline and clothes pegs

Maths language

- days of the week, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, informal use of: yesterday, today, tomorrow

Warm-up

C Class discussion: Days of the Week

***MAM* Routine: Reason & Respond**

Assessment Opportunity

Assess the children's knowledge and understanding of the days of the week. During the year, their attention will have been drawn to the name of each day (e.g. 'Today is Friday. What do we do on Friday?'). However, have the children understood the meaning of the day's position in the weekly sequence and how it relates to them? Ask:

- What day is it today? What do we do on Monday?
- What day was it yesterday? What did you do yesterday? (Ask a child to elaborate on what they did so that the concept of 'yesterday' is consolidated.)
- Is yesterday *finished*?
- What day is it tomorrow? What will you do tomorrow? Does anyone go swimming/play football on Tuesday?
- What is the weather like today? What was it like yesterday?
- What do you think the weather will be like tomorrow? (You could make a data chart of what each group thinks the weather will be like tomorrow. When tomorrow comes, which group was right?)

Let's deepen

Ask:

- How do you know it is Monday today? (Yesterday was Sunday, so today is Monday.)

P Story: *Mr Wolf's Week* by Colin Hawkins

***MAM* Routine: Notice & Wonder**

Read *Mr Wolf's Week* by Colin Hawkins, in which Mr Wolf wears an outfit that is suited to both the weather conditions and the activity that he does on each day of the week. Focus the children's attention on the weather, the outfit and the activity for each individual day. Ask:

- What was the weather like on Tuesday?
- Can anyone remember what Mr Wolf wore on Tuesday?

Go through the sequence again, to help the children to see how the week unfolds as seven days. Highlighting each day will help them to understand the significance of each day.

Teaching tip

A reading of *Mr Wolf's Week* is also available at: edco.ie/whau

Main event

C Concrete activity: Mr Wolf's Week

Split the class into six groups. Use the Unit 16 Maths Language Cards to assign a different weekday to each of five groups, and both Saturday and Sunday to the sixth group. Prompt each group to recall what Mr Wolf wore on their day(s) and what activity he did that day. Distribute play dough/Play Area props or paints/crayons to each group. Ask the children to recreate Mr Wolf's day. When all of the groups are ready, a representative from each day could present their group's play dough creation, role-play their assigned day or peg their creation(s) and Unit 16 Maths Language Card on the class clothesline, in the correct order. As you go through the week, draw attention to Mr Wolf's outfit and activity on each day.

Optional consolidation and extension possibilities

Role Play The children dress up in Mr Wolf's various outfits and role-play his activities.

Rap Help the children to compose a rap for the days of the week, based on various actions, for example:

Monday I climb like a monkey.
Tuesday I'm a chimpanzee.
Wednesday I clump in my wellingtons.
Thursday I go thump, thump, thump!
Friday I hop like a frog.
Saturday I swim like a salmon.
Sunday I surf, surf, surf!

To integrate this activity with PE, ask the children to perform the actions from their rap in the PE hall.

Maths Language Cards Use the names of the days of the week and stick them onto a poster/chart. Attach the labels: 'Yesterday', 'Today' and 'Tomorrow' to three clothes pegs and peg them in the relevant places each day, as the week goes on (e.g. peg 'Today' to the correct day of the week). Hang the chart on the class clothesline. Then, each day, the children help you to peg the 'labels' to the left-hand side of the correct days. Help the children to begin to recognise the names of the days of the week by focusing on the initial letter of each word, and prompting them to use their phonics sounds: /m/ for '**M**onday', /t/ for '**T**uesday', etc. Draw their attention to the two days that begin with the /s/ sound – **S**aturday and **S**unday. You could peg images of the week's activities to the right-hand side of the chart (e.g. a picture of a swimmer to the right of a swimming day).

Home/School Links Book Page 38 can be completed any time after this lesson.

Day 2, Lesson 2

Sequencing the Days of the Week

Focus of learning (with Elements)

- Recalls the sequence of the days of the week (C)

Learning experiences

- D Animation: Days of the Week Song
  MAM **Routine: Reason & Respond**
- C Concrete activity: Missing Days
- C P Concrete activity: Sequencing the Days of the Week
- P Pupil's Book page 87: Sequencing the Days of the Week

Equipment

- Class clothesline and clothes pegs
- Glue
- Scissors
- PCM 4

Maths language

- There is no new maths language for this lesson.

Warm-up

Teacher's note: Use this activity to assess the children's knowledge of ordering and ordinality.

Assessment Opportunity

D Animation: Days of the Week Song

***MAM* Routine: Reason & Respond**

Play the animation and ask the children to sing along to the song, which has minimal lyrics set to a catchy beat. Afterwards, the children help you to peg the days of the week on the class clothesline in the correct order. Ask:

- How many days are there in the week? Let's count them.
- Which day comes first?
- Which day comes second?
- Which day comes after that?
- What day is it today? Where does that day go?
- Which day comes next?
- Which day comes after Wednesday?
- Which day comes before Friday?
- Which day comes last?
- What day was it yesterday?
- What day will it be tomorrow?

Teaching tip

You might like to sing the song with the children every day this week.

C Concrete activity: Missing Days

Ask the children to close their eyes. Take away a day from the class clothesline. Give the children a clue to help them identify the missing day, for example:

- We do PE on this day. Which day is it?
- We have no school on these two days. Which two days are they?

Flip the activity above by naming a day and asking the children to guess what activity you are talking about. For example, ask:

- We do this on Friday. What do we do on Friday?

Ask:

- Is it any child's birthday this week? Which day?

Remove the days of the week from the clothesline. Give one to each of seven children and ask the rest of the class to help them form the correct sequence.

Teaching tip

Employ the children's phonics skills here. Can they sound out the initial letter of the name of each day? Some children might focus on the 'shape' of the whole word. The children are not expected to be able to read the names of the days of the week, but taking a phonics approach will help the children who would like to try to do so.

Main event

C P Concrete activity: Sequencing the Days of the Week

Distribute scissors and a copy of PCM 4: Sequencing the Days of the Week to each child. The children cut out the days of the week, and colour or draw a pattern on the initial letter of each. This will help them to individualise each day, and read it. In pairs or groups, the children work together to put the days of the week in order on their table. (Note: Retain each child's cut-outs for completing the activity on page 87 of the Pupil's Book.)

Teaching tip

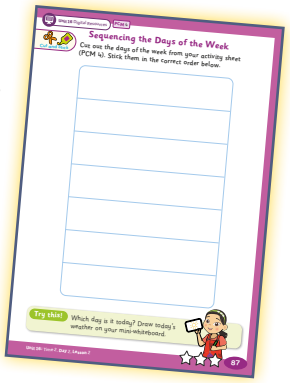
The children whose reading ability is greater will be able to help those who might struggle with reading each of the seven days.

Ask the children to work in pairs. Tell them to mix up their days of the week and reorder them. They order them from top to bottom, and then as a 'train', from left to right. Then, one child closes their eyes while their partner takes away a day. When they open their eyes, can they identify the missing day?

Let's deepen

The children work in pairs. Child A closes their eyes while Child B takes away *two* days. When Child A opens their eyes, can they identify the missing days?

P **Pupil's Book page 87: Sequencing the Days of the Week**



Optional consolidation and extension possibilities

Monty's Dog Food Use seven small cylinders/coloured spools to represent tins of food for Monty and attach a label with a day of the week to each. The tins are neatly lined up for the week, before Monty (i.e. the puppet) knocks them all over! Can the children work as a group to put them in order again?

Get in Order (Integration with PE) Split the children into groups of seven and assign the children in each group the names of 'Monday', 'Tuesday', etc. Which group can get themselves into the correct order fastest?

Song Teach the children to sing the song below to the tune of 'Frère Jacques'.

Days of the Week Song

There are seven, there are seven,
Days in the week, days in the week,
Monday, Tuesday, Wednesday,
Thursday, Friday, Saturday,
Sunday too. Sunday too.

Bee-Bots If you have Bee-Bots, use them to reinforce the concept of a sequence.

Day 3, Lesson 3

Personalising the Days of the Week

Focus of learning (with Elements)

- Differentiates each day of the week by personalising it (U&C)

Learning experiences

- **D** Digital activity: Mia's Week
  ***MAM* Routine: Reason & Respond**
- **P** Story: *Today is Monday* by Eric Carle
- **C** Concrete activity: Dish of the Day
- **P** Pupil's Book page 88: Personalising the Days of the Week

Equipment

- Unit 16 Maths Language Cards
- Monty the puppet
- Picture book: *Today is Monday* by Eric Carle
- Scissors
- Glue
- Seven paper plates
- Food magazines (ensure references to or advertisements for unsuitable food items or beverages are removed first)
- Manipulatives
- Cotton wool
- Wool in various colours
- Play dough

Maths language

- There is no new maths language for this lesson.

Warm-up

D Digital activity: Mia's Week
***MAM* Routine: Reason & Respond**

Use Monty the puppet and the Maths Language Cards: Days of the Week. Display the sequencing activity. Explain to the children that Mia does different activities on each day of the week and they need to help her to figure out on which day she will be doing each activity. For each card, discuss what activity Mia is doing on that day, then put the days of the week in the correct order. Ask:

- (Hold up the Monday flashcard.) Which day is this?
- Does anyone do anything special on this day?
- Does anyone do anything special on Wednesday?
- On which day do you do dancing?

The children's minds are now focused on what each different day means and how 'long' it takes for it to come around.

Teaching tip

Many children will not know on which day they do specific activities, while others will know the name of the day, but not how 'soon' that day will be (i.e. Is it today/tomorrow?).

Main event

P Story: *Today is Monday* by Eric Carle

Read *Today is Monday* by Eric Carle, which features a different type of food on each day of the week. Ask the children if they eat a certain food on a certain day, for example:

- Do you have chicken on Monday? Pizza on Friday? Sausages on Saturday?

Teaching tip

A reading of *Today is Monday* is also available at: edco.ie/qb9k

C Concrete activity: Dish of the Day

Assess whether the children are internalising the concept of a sequence. Have they grasped the consecutive nature of the days of the week?

Assessment Opportunity

Tell the children that we are going to make a 'dish of the day' for every day of the week. Split the children into seven groups. Distribute scissors, glue, a paper plate, a food magazine (ensure references to or advertisements for unsuitable food items or beverages are removed first), manipulatives, cotton wool, wool in various colours and play dough to each group. Assign each group a day of the week. They can cut out food pictures from the magazines, or use manipulatives, cotton wool, wool or play dough to make food. They might make a pizza with different toppings (manipulatives), mashed potato (cotton wool), spaghetti (wool) or sausages (play dough). When all the dishes are ready, display them in the order of the days of the week. One child from each group explains their dish to the class.

P Pupil's Book page 88: Personalising the Days of the Week

Optional consolidation and extension possibilities

Role Play The children set up a restaurant, and role-play waiting staff, serving up the dishes that they made earlier to diners.

Alliteration and Action (Integration with PE) Ask the children to help you come up a different action for each day of the week, using alliteration. For example: on Monday we moonwalk (take giant steps); on Tuesday we toddle (move like toddlers); on Wednesday we wobble; on Thursday we think hard (hand under chin); on Friday we fly; on Saturday we make a sandwich (three children together); on Sunday we sing. When you call out a day of the week, the children perform the correct action for that day. Anyone performing an incorrect action is out!

Day 4, Lesson 4

‘Long Time’ and ‘Short Time’

Focus of learning (with Elements)

- Connects amount of time passing with experience (U&C)

Learning experiences

- (P) Story: *Jasper’s Beanstalk* by Nick Butterworth
- (C) Concrete activity: Planting Seeds

Equipment

- Picture book: *Jasper’s Beanstalk* by Nick Butterworth
- Compostable seedling pots (or compostable coffee cups)
- Compost
- Fast-germinating seeds, such as cress, sunflower, pumpkin, radish or wildflowers
- Spray bottle
- Lollipop sticks for labels
- Marker

Maths language

- long time, short time

Warm-up

(P) Story: *Jasper’s Beanstalk* by Nick Butterworth

Read *Jasper’s Beanstalk* by Nick Butterworth, which links the days of the week and the concept of time elapsing. Jasper plants a seed on Monday and tends to it each day of the week, but it does not seem to be growing, so he is going to have to wait ...

Teaching tip

A reading of *Jasper’s Beanstalk* is also available at: edco.ie/7yfa

Discuss the concept of time passing with the children. Ask:

- What day is it today? What day was it yesterday? What did you do?
- (Focus on something they did that probably took a ‘long time’, e.g. going to a friend’s house.) Did it take a long time to get there?
- Did anyone else do something yesterday?
- (Choose something they did that probably took a short time, e.g. drinking a glass of milk.) Did that take a long time?

Let’s deepen

Ask:

- Which took longer: driving to a friend’s house or drinking a glass of milk?

You are raising *awareness* of an action taking a longer time. During the day, draw attention to some scenarios in the classroom that take a ‘long’ or ‘short’ time, for example:

- Sarah is going to sharpen her pencil. Will that take a long time?
- Saleem is going to put this paper in the bin. Will that take a long time?
- We’re going out into the yard to play. Will that take a long time?
- Put your head on your table for a little sleep (a few minutes). Now, wave your hands. Which took more time/longer/a longer amount of time?

Main event

Time 'passing' is a key concept. Assess whether the children are embedding the concept. Are they realising that some actions take a short time and some actions take a long time?

Assessment Opportunity

C Concrete activity: Planting Seeds

Distribute a compostable seedling pot, compost and seeds to each child or group, depending on your class numbers. The children half-fill their pot with compost, sprinkle in a few seeds, and cover them with more compost. Use a spray bottle to water the seeds. Use lollipop sticks to make labels for the pots, recording the name of each child/group, the type of seed and the date of planting. Place the pots in a sunny area of the classroom, such as a windowsill. Ask:

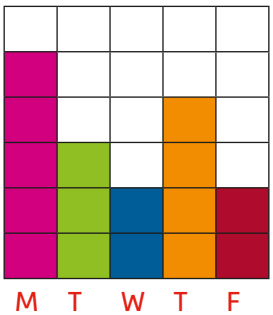
- What day is it today?
- Jasper thought his seeds would grow very quickly. Did his seeds grow quickly?
- When do you think we will see our seeds begin to grow? Tomorrow?
- How will we know that they are beginning to grow? (We will see some green shoots.)
- Will it take a long time for the seeds to grow? Will it take as long as going to the park (going swimming? going away on holidays?)?
- If Jasper goes outside the door and comes back in again, will the seeds have grown?
- When we come back into school tomorrow morning, will the seeds have grown?
- On what day do you think the seeds will start growing? Will it be on a Monday?

Explain that our seeds will take a 'long time' to grow. Ask:

- What could we do now that takes a *short* time? (Clap hands; jump up; shake our partner's hand; sing 'la, la, la'; smile; rub our nose.)
- What else could we do that takes a short time?

Let's deepen

Ask the children to guess on which day (weekdays only) they each think that they will *see* the first shoots emerge from the compost. Draw or make a block chart showing their predictions (e.g. five children think they will see the first shoots on Monday.) (Can anyone guess why the block chart does not include Saturday or Sunday?)



Optional consolidation and extension possibilities

Role Play The children role-play the characters in the story of *Jack and the Beanstalk*.

Maths Eyes Draw the children's attention to objects in the classroom as you ask: Which takes longer/more time ...

- Putting on your hat or reading a story?
- Taking a book out of your school bag or playing in the yard?
- Building a house with Lego or putting paper in the bin?
- Tidying up the Play Area or opening your water bottle?
- Choosing a crayon or eating your sandwich?
- Opening the classroom door or filling a jar with water?

Day 5, Lesson 5

Experiencing Fast and Slow

Focus of learning (with Elements)

- Uses or responds to simple language associated with time (C)

Learning experiences

- (D) Animation: Fast and Slow Music *MAM* **Routine: Notice & Wonder**
- (D) Audio: The Old Grey Cat Is Sleeping
  MAM **Routine: Notice & Wonder**
- (C) (D) Concrete activity: Slow Cats and Fast Mice
- (P) Pupil's Book page 89: Experiencing Fast and Slow

Equipment

- Musical instruments such as tambourines, drums or maracas (optional)

Maths language

- fast, slow

Warm-up

(D) Animation: Fast and Slow Music
MAM **Routine: Notice & Wonder**

Play the animation and assess the children's understanding of the concept of fast or slow. As they listen to the same tune being played fast and slow, they identify each version.

Assessment Opportunity

The children use their hands, fingers and feet to clap, tap and stamp fast beats and slow beats. If tambourines, drums or maracas are available, use these to play fast rhythms and slow rhythms.

Main event

(D) Audio: The Old Grey Cat Is Sleeping
MAM **Routine: Notice & Wonder**

Play the song. When the song refers to 'creeping', the music is slow; when it refers to 'nibbling' and 'scampering', it speeds up. The children sing along, matching the pace of their singing to the pace of the music.

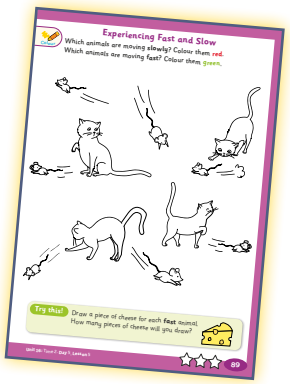
The old grey cat is sleeping, sleeping, sleeping.
The old grey cat is sleeping in the house.
The little mice are creeping, creeping, creeping
The little mice are creeping through the house.
The little mice are nibbling ... in the house.
The little mice are dancing ... in the house.
The old grey cat is creeping ... through the house.
The little mice are scampering ... through the house.

(C) (D) Concrete activity: Slow Cats and Fast Mice

Split the children into two groups: cats and mice. Clear an area in the classroom or use the PE hall. Play the audio of 'The Old Grey Cat Is Sleeping' again. The cats pretend to be sleeping – crouching down and being very quiet. The mice tiptoe very slowly and quietly, so as not to wake up the cats. The song gets faster when the mice are 'nibbling' very quickly. Then, the mice are still and quiet, while the cats get up and 'creep' around the mice on their tiptoes. Finally, the mice 'scamper' away, while the cats give chase and try to catch as many mice as they can.

Pair Work: Back at their tables, the children play in pairs. Child A plays the cat, with their fist curled up on the table and their eyes closed. Child B plays the mouse, quickly walking their fingers around the cat (their partner's fist) on the table. Can the cat pounce on the mouse and catch it (covering the 'mouse' with their hand)?

(P) Pupil's Book page 89: Experiencing Fast and Slow



Optional consolidation and extension possibilities

Dance Play the song 'A Ram Sam Sam'. The children sing the chorus ('If you wanna be a ram sam master, you gotta go a little faster!') and learn the dance moves. The song gets faster as it progresses: edco.ie/ybsh

STEM The children build a ramp (e.g. by leaning one book against a stack of books), and then roll marbles or toy cars down it. Which rolls faster/slower, the cars or the marbles? They experiment with different ramp designs and angles.

Games Bank Play 'Cat and Mice' from the Games Bank.

Video Play the video, in which Cookie Monster tricks Ernie (yet again) in this scenario about fast and slow: edco.ie/xngz

Story Read *The Hare and the Tortoise* or listen to a reading at: edco.ie/mdgc

Video Play the video (a different take on *The Hare and the Tortoise*) at: edco.ie/tys6

Day 6, Lesson 6

Measuring Time Passing

Focus of learning (with Elements)

- Actively measures time passing, using non-standard measures (e.g. claps, bounces, ticks) (C)
- Explores different, non-standard devices available to demonstrate time passing (U&C)
- Considers the duration of tasks (e.g. tidying one's desk, eating one's lunch) (C)

Learning experiences

- (C) Concrete activity: 'Measuring' Time
- (C) Concrete activity: Discovering Sand Timers

Equipment

- Five one-minute sand timers

Maths language

- sand timer

Warm-up

Assess whether the children have grasped the idea that the 'measurement' of time needs to be 'fair'.

Assessment Opportunity

(C) Concrete activity: 'Measuring' Time

Ask the children to clap their hands. Try a few other actions, for example: wave your hands in the air, shake your hands, stand up and sit down, make circles on the table with your finger, click your tongue, tap on the table, etc. Say/ask:

- Conor is going to put this piece of paper in the bin. How many claps do you think it will take? Let's clap.
- Conor is going to put another piece of paper in the bin. Does anyone remember how many claps it took? Let's see if we were right.

Try different 'measuring' activities (e.g. sharpening a pencil, getting the copies), using some of the actions above.

Let's deepen

Explain that Conor is going to put another piece of paper in the bin. We're going to clap again, but this time, we're going to clap very slowly. How many claps will it take?

Say/ask:

- How many claps *did* it take?
- Now, let's try it again, clapping quickly. How many claps did it take?
- Again, you are drawing the children's attention to the need for a standard measurement of time, but not labouring the point or trying to explain it.

Throughout the day, the children measure how long tasks are taking to perform. For example, assign a child to clap the length of time it takes for everyone to 'déan líne' and/or tidy their desk. (Optional question: Are they clapping slowly or quickly?)

Teaching tip

Clapping slowly and then quickly while a task is being performed, raises the children's awareness that using non-standard measures is not a 'fair' measurement. You could use a stopwatch/clock that audibly ticks the seconds. Can the children clap in time with the device? Do they notice how 'regular' and 'fair' the sound is?

Main event

C Concrete activity: Discovering Sand Timers

Show the children a sand timer. Ask:

- Has anyone ever seen one of these?
- Does anyone know what it is called?
- What do you think it does?
- What might it be used for?
- How does it work?
- What would be a good name for this?
- Will we see 'how long' it takes for the sand to move from one glass to the other?
- What will we do while we're waiting?
- What do you think we might have time to do while we're waiting? Let's find out.

Ask each group to do one of the following while the sand timer is working:

- Slowly clap ten times.
- Read your English book.
- Write the numerals 1 to 10.
- Sing a song/draw a picture.
- Make a snake from play dough/do a jigsaw puzzle.

Which group got their task completed before all the sand ran out? Now that the children have a rough idea of how long it takes for the sand to run out, can they transfer that knowledge to carrying out tasks? Ask them to suggest other tasks that could be completed before the sand runs out (e.g. sharpen a pencil, line up the crayons, stack the copies, tap the table ten times, scratch their head five times, use every colour of crayon, fold a piece of paper three times, cut out a picture from a magazine with pictures of unsuitable food or beverages removed, write six letters). You are not expecting accuracy, but each of these activities deepens their knowledge of time passing.

Distribute a sand timer to each group. One child in each group is in charge of turning over the timer (when the others are ready), and others experiment to find out what tasks they can complete before the sand runs out. They record what they can do in their Maths Journals or on their MWBs.

Let's deepen

Set up one group at the Sand Area, and challenge the children to find out how a sand timer works. Guided by you, they experiment with sand and two containers. The sand is poured *slowly* from one container into the other. Would a funnel help? Could they slow down the flow of sand in some way? This experience will give them a clear idea of how the sand timer works, and the problems to be solved. You are not expecting them to solve these problems, but to engage in realising that there is a problem and trying to find a solution.

Let's deepen

Can the children experiment with making a water timer (based on the same principle as the sand timer)? You could give them a container and then poke some small holes in the bottom of a water bottle to get them started.

Optional consolidation and extension possibilities

Homemade Sand Timer Try making a sand timer (also known as an egg timer) with the children, using the following link: edco.ie/ub5z

Where's the Bear? Hide a teddy bear in the classroom. The children take turns to try to find the teddy bear in the time that it takes for the sand in the sand timer to run out.

How Many Claps? (Integration with PE) For how many claps can the children ... stand on one leg? stand on the other leg? close their eyes and stand on one leg? keep their arms outstretched? Alternatively, you could use the sand timer instead of clapping.

Obstacle Course (Integration with PE) Set up an obstacle course in the PE hall. The course includes rolling on mats, jumping in and out of hula hoops, throwing a small beanbag, etc. One child is Timekeeper: they clap ten times and count aloud to ten. The other children try to complete the obstacle course before the timekeeper reaches ten. In the next round, another child is Timekeeper, but they must choose to speed up or slow down their clapping/counting (or you could take over). Do the children realise that they have less/more time to complete the course in this round?

Day 7, Lesson 7

Time All Around Us

Focus of learning (with Elements)

- Begins to recognise that there are standard universal ways of expressing time (C)

Learning experiences

- (D) Digital activity: Time All Around Us
  MAM **Routine: Reason & Respond**
- (C) Concrete activity: Time Collage
- (P) Pupil's Book page 90: Time All Around Us

Equipment

- Classroom clock
- Sand timer
- Magazines
- Scissors
- Glue
- PCM 58

Maths language

- There is no new maths language for this lesson.

Warm-up

Assess whether the children are beginning to notice that 'time' plays an integral part in their lives. Are they more aware of its relevance to themselves?

(D) Digital activity: Time All Around Us
***MAM* Routine: Reason & Respond**

Play the slideshow, which contains a range of real-life examples of 'time all around us' (e.g. clocks, watches, phones, town hall clocks). Ask:

- Can anyone see a clock in the classroom?
- Did anyone hear the school bell today? Why do we need a school bell?
- Does anyone in your family wear a watch? Why do they wear a watch?
- Did anyone hear an alarm clock this morning? Was it on your mam's/dad's phone?
- Why do we need an alarm clock? What would happen if we didn't use an alarm clock?
- Did anyone see any clocks on their way to school? Look out for clocks on your way home and tell us about them tomorrow.
- Why do we need to know what time it is?

Let's deepen

- Could we use the sand timer to tell us when it is time to go home?
- What would happen if we did not know what time it was?
- What would happen if we were too late/early for a playdate?

Main event

C Concrete activity: Time Collage

Distribute scissors, glue, a magazine (ensure magazines are child-friendly, with unsuitable content removed), a large sheet of paper and a copy of PCM 58: Time All Around Us to each child. Ask the children to make a collage of devices used to tell the time, using images cut from the magazine and the PCM. If you wish, you could put a time limit on this, which the children can observe. Use the sand timer and turn it over a few times (one child in each group could 'monitor' the sand timer). On a MWB, record the number of times the sand timer is turned over.

P Pupil's Book page 90: Time All Around Us

Optional consolidation and extension possibilities

Role Play Use old watches, clocks and sand timers to set up a jeweller's shop. The children role-play buying and selling the merchandise.

Maths Eyes The children go on a Time Hunt around the school or at home. They record their findings in picture form.

Home/School Links Book Page 39 can be completed any time after this lesson.

Song Teach the children to sing the song below to the tune of 'The Wheels on the Bus'.

The Hands on the Clock

The hands on the clock go round and round,
Round and round, round and round.
The hands on the clock go round and round,
All day long.

Day 8, Lesson 8

O'Clock Times

Focus of learning (with Elements)

- Recognises instruments which tell the time and acknowledges time passing throughout the day (A&PS)

Learning experiences

- P Story: *What's the time, Mr Wolf?* by Colin Hawkins
  ***MAM* Routine: Reason & Respond**
- D Digital activity: My School Day ***MAM* Routine: Reason & Respond**
- C Concrete activity: My Day
- P Pupil's Book page 91: O'Clock Times

Equipment

- Picture book: *What's the time, Mr Wolf?* by Colin Hawkins
- Scissors
- Glue
- PCM 5

Maths language

- o'clock

Warm-up

P Story: *What's the time, Mr Wolf?* by Colin Hawkins *MAM* Routine: Reason & Respond

Read *What's the time, Mr Wolf?,* which tells the story of Mr Wolf's day. A simple time sequence is used – beginning at 7 o'clock in the morning, when Mr Wolf gets up; ending at 6 o'clock in the evening, when he goes to bed. Focus on what Mr Wolf does at each 'o'clock' time, rather than on the clock itself.

Teaching tip

You are not expecting the children to be able to 'tell the time'. You are drawing their attention to the clock, and how the clock affects our day.

Try to elicit the sequence of Mr Wolf's day from the children. Ask:

- At what time did Mr Wolf get up out of bed?
- What did he do next?
- At what time did he brush his teeth?
- What did he do after he brushed his teeth?
- At what time did he have his breakfast?

Keep going until Mr Wolf goes to bed.

Teaching tip

A reading of *What's the time, Mr Wolf?* is available at: edco.ie/vvtv

Main event

Assess whether some children are having difficulty with the concept of a 'sequence'. Do they understand and can they use terms such as 'What happens next?'

Assessment Opportunity

D Digital activity: My School Day
***MAM* Routine: Reason & Respond**

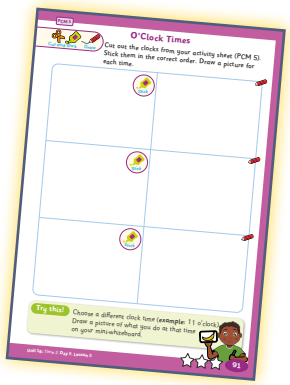
A similar activity was previously used in Unit 4: Time 1, but for this activity, 'o'clock' times are added. Display the interactive tool, and use the text and images to build a simple visual timetable for the day, to align with the times of 9, 10, 12, 1 and 2 o'clock (some creative freedom may be needed). Drag and drop the subjects beside the times, and then refer back to the timetable throughout the day. You could save this as a template and update the timetable for other days of the week (e.g. PE at 10 o'clock on Friday).

C Concrete activity: My Day

Distribute scissors and a copy of PCM 5: O'Clock Times to each child. The children cut out the clocks. You are not expecting them to *read* the time on the clocks, but to identify the numeral below each. They discuss what they do at each of those times (get up, go to school, circle time/reading/PE, etc). Then they discuss the correct *sequence* of the times (8, 9 and 10 o'clock), and which activity comes first and why. (Note: Retain each child's cut-outs for completing the activity on page 91 of the Pupil's Book.)

P Pupil's Book page 91: O'Clock Times

Distribute glue to each child.



Optional consolidation and extension possibilities

Role Play The children role-play Mr Wolf over the course of his day. One child is Town Crier and announces the times.

Story Read *The Clock Struck One* by Trudy Harris or listen to a reading at: edco.ie/8b3m

Let's Strengthen The children draw what Mr Wolf did at each of the three times given on the Unit 16 Let's Strengthen PCM.

Let's Deepen Use the Unit 16 Let's Deepen PCM – Mr Wolf's Day: Afternoon.

Day 9, Lesson 9

Exploring the Clock

Focus of learning (with Elements)

- Begins to recognise that there are standard universal ways of expressing time (C)
- Recognises instruments which tell the time and acknowledges time passing throughout the day (A&PS)

Learning experiences

- D Animation: Monty and the Clock
  MAM Routine: Notice & Wonder
- C Concrete activity: Making a Clock Face
- P Pupil's Book page 92: Exploring the Clock

Equipment

- Monty the puppet
- Sticky notes
- Scissors
- Paper plates
- Adhesive putty/sticky tack or glue
- PCM 59

Maths language

- big hand, little hand

Warm-up

D Animation: Monty and the Clock
MAM Routine: Notice & Wonder

Use Monty the puppet alongside the animation. Play the animation, in which Lexi helps Jay and Monty to identify the sequence of numbers 1–10. (Note that the numbers 11 and 12 come at the end of the sequence, but are not focused on.) Lexi, Jay and Monty decide to make a clock with the numbers; they arrange them in a circle and add a big hand and a little hand. Monty drops the big hand, so Lexi just uses the little hand to point to the clock numbers. Jay reads the numbers and says what Monty does at those times (with snack time being his most enthusiastic response).

Main event

C Concrete activity: Making a Clock Face

This is an opportunity to assess which children are having difficulty forming the numerals 1 to 10, and which numerals are they having difficulty with.

Let's deepen

If the children are confident at writing the numerals 1 to 10, give them sticky notes on which to write. These children might also write the numerals 11 and 12 on sticky notes, or you could give them the numerals 11 and 12 from PCM 59: Numerals 1 to 12.

Distribute scissors and a copy of PCM 59 to the other children, and ask them to cut out the numerals. The children arrange their numerals, in sequence, in a horizontal line. Sequencing provides an opportunity to revise counting skills and ordering (1–10.)

Let's strengthen

The children may need help with forming and sequencing the numbers.

Ask the children to use their index ('pointy') finger to point to each numeral when you call it out. (Alternatively, they could make a 'little hand' with a pencil or crayon.) You could then call out random numbers and ask the children to locate the number and point to it. Ask:

- Would This Work? How could we make a clock (face) with these numbers? What shape is a clock? Could we try putting the numbers in a circle?

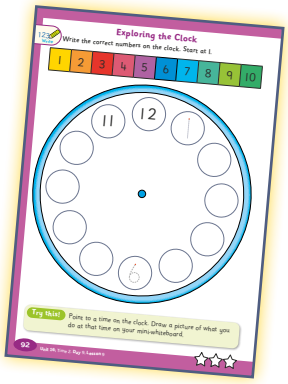
- Which number will we start with?
- How much space will we leave between the numbers? (perhaps a fingernail's width)
- Can you still name all of the numbers? (Some numbers may appear 'crooked' now.)
- What number is at the bottom? (6)
- Put your pencil or crayon in the middle of the circle. Point it to a number. What time is it?
- What do you do at that time?

If you have enough time, the children could stick their numbers onto a paper plate, using adhesive tack or glue, and use their pencil/crayon as a little hand, with which to make times. They could draw a face on the clock/plate, decorate it and personalise it. You can integrate this activity with Visual Arts.

Teaching tip

There is no focus on the numerals 11 and 12; the children are merely making up the clock face.

Pupil's Book page 92: Exploring the Clock



Optional consolidation and extension possibilities

Story Watch the story *The Old Clock's New Hands*, in which an old clock loses its hands, but the townspeople rely on the clock to tell the time: edco.ie/b649

Rhyme: Teach the children the rhyme below, changing the time given in each verse. They can make up their own words for the last line of each verse.

Tick tock, goes the clock.
What time will we see?
Tick tock, it's (one) o'clock!
(Have your lunch with me!)

Tick tock, goes the clock.
What time will we see?
Tick tock, it's (two) o'clock!
(Time to play with me!)

Song Play the song 'Tick Tock I'm a Little Cuckoo Clock'at edco.ie/ed7g

In this simple song, a clock tells the times 1 o'clock to 6 o'clock, with the cuckoo emphasising each time.

Song Play the song 'Hickory Dickory Dock' at: edco.ie/vj9h

Problem-solving Pose some time problems, such as:

- Do I have my dinner *after* lunch?
- Do I eat my breakfast *before* lunch?
- Do I listen to a bedtime story *after* breakfast?
- Do we have break time and *then* lunchtime?
- Which comes *first*, going to school or home time?
- Which takes more time, eating my lunch or combing my hair?

Day 10, Lesson 10

Review and Reflect

Focus of learning (with Elements)
• Reviews and reflects on learning (U&C)

Warm-up

Carry out a warm-up activity of your choice from one of the lessons in this unit.

Main event

Choose from this menu of activity ideas, or choose your own way to best structure this last lesson to suit your needs and the needs of your class.

Let's talk!	**Let's sing!**
Read some of the stories you might not have had time to read, or reread a story and discuss the illustrations in greater depth.	Choose one of the songs for the children to get to know better, or play some fast and slow music and encourage the children to dance to it.
Maths language	**Let's play!**
Refer to the classroom clock and/or the My School Day e-manipulative as often as you can (e.g. 'It's 1 o'clock: time for a story'). Use the maths language cards for this unit to revise key terms. For example: if the image and text are cut apart, can the children match them?	Try one of the suggested role-play activities (e.g. re-enacting Mr Wolf's Day) that you might not have had a chance to try.
Progress Assessment Booklet	**Maths eyes**
Complete questions 65–66 on page 29. Alternatively, these can be left to do as part of a bigger review during the next review week.	Use some of the Maths Eyes suggestions or revisit the slideshow titled 'Time All Around Us'.
Let's strengthen	**Let's deepen**
Identify children who might benefit from extra practice with some of the key concepts or skills in this unit. Consult the Unit 16 Let's Strengthen Suggestions for Teachers and/or use the Unit 16 Let's Strengthen PCM.	Some children might be ready to use the big hand as well as the small hand on the clock. Use the Unit 16 Let's Deepen PCM.

Notes