# Maths and Me: Junior Infants – Short-Term Plan, Unit 11: Measuring 2 (March: Weeks 1&2)

Measures > Measuring.

Strand(s) > Strand Unit(s)

Learning (	Outcome(s)	Through appropriately playful and engaging learning experiences children should be able to demonstrate an aware and compared.	s that attributes such as length, weight, capacity i	ld area can be measured
l accon		Encris of Learning (with Flements)	CM I aarning Exneriences	Accacement
1	Empty and Full: Exercise (e.g. length: long/s	xplores how measures help us to make sense of our world (U&C); Explores and identifies the different attributes short, weight: heavy/light, capacity: full/empty) of a single object that can be measured (U&C)	<ul> <li>Construction &amp; Respond L1-5, L7-8</li> <li>Notice &amp; Wonder. with L1-2</li> </ul>	Intuitive Assessment: responding to
2	Comparing Two Id vocabulary to desci	<b>lentical Containers</b> : Recognises that to be accurate, measurements must be fair (U&C); Uses appropriate cribe and then compare measurable attributes (C)	D C Think-Pair-Share L1–2 C Comparing Different Containers L3	emerging misconceptions
ĸ	Comparing Differe various materials u:	<b>ent Containers:</b> Describes and discriminates between items using appropriate comparative language (C); Explores used to compare the attributes of length, weight, capacity and area (A&PS)	C Comparing Similar Containers L4 Selecting Suitable Containers L5	
4	Comparing Similar objects, containers containers or surfa	r Containers: Predicts how measurable attributes of objects will compare to each other (R); Compares and orders s and surfaces according to appropriate measurable attributes (A&PS); Makes direct comparisons of objects, aces to compare measurable attributes and develop an understanding of same (U&C)	What it Means to Cover Something L     Exploring How Much Space Objects     Cover L6	Planned Interactions: responding to insights gleaned from
2	Selecting Suitable Listens to and resp	<b>• Containers:</b> Chooses an object from a group of objects for a purpose based on a particular attribute (A&PS); bonds to a range of stories and rhymes involving concepts of measurement (C)	Measuring Objects Fairly L7     Ordering Pieces of Fabric by Area L8	children's responses to learning
Q	Areas of Different appropriate vocabu containers and volu	<ul> <li>Objects: Listens and responds to a range of stories and rhymes involving concepts of measurement (C); Uses ulary to describe and then compare measurable attributes (C); Compares and orders objects according to length, umes according to capacity, and surfaces and shapes according to area (U&amp;C)</li> </ul>	C Choosing the Correct Object L9 Making up Parcels at the Post Office	experiences
7	Making Fair Measu of objects will com area (A&PS)	<b>urements:</b> Recognises that to be accurate, measurements must be fair (U&C); Predicts how measurable attributes npare to each other (R); Explores various materials used to compare the attributes of length, weight, capacity and	Print resources Pupil's Book pages 63–66 Home/School Links Book pages 28–29	Assessment Events: information gathered
∞	Ordering by Area: objects, containers comparing (A&PS)	. Describes and discriminates between items using appropriate comparative language (C); Compares and orders and surfaces, according to appropriate measurable attributes (A&PS); Selects and uses suitable materials for		Trom completion of the unit assessment in the Progress
6	Choosing the Corr Describes and discr containers or surfa	<b>rect Object:</b> Chooses an object from a group of objects for a purpose based on a particular attribute (A&PS); riminates between items, using appropriate comparative language (C); Makes direct comparisons of objects, aces to compare measurable attributes and develop an understanding of same (U&C)		page 21
10	Review and Reflec	<b>ct:</b> Reviews and reflects on learning (U&C)		

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

# Additional information for planning

Progression Continua	See 'Junior Infants <i>Maths and Me</i> 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 11 Maths Language Cards.	
Equipment	See 'Junior Infants Maths and Me Equipment Overview' and individual lesson plans.	
Inclusive Practices	<ul> <li>See Let's Strengthen and Let's Deepen suggestions throughout lesson plans.</li> <li>See Unit 11 Let's Strengthen Suggestions for Teachers. (These address the Common Misconceptions and Difficulties listed below.)</li> <li>See Unit 11 Let's Strengthen PCM.</li> <li>See Unit 11 Let's Deepen PCM.</li> </ul>	
Integration	See individual lesson plans.	

# **Background and rationale**

- A key recommendation is to allow the children to engage in 'free play' with all of the containers and materials that you supply them with. At this stage, the children are formulating their own discoveries about capacity while using the objects and materials (without guidance).
- Subsequent intervention will provide guided discovery with regard to making comparisons between containers, and deciding which object will be most suitable in carrying out investigations.
- Before making comparisons, the children will need to understand the following key language of capacity: *full* and *empty*. They will learn that 'fairness' is aligned with these terms. When we say 'full', we mean 'full to the brim'. When we say 'empty', we mean 'nothing left in the container'.
- 'Fairness' is key in making capacity comparisons between identical containers. For example: *Is it fair to use cubes to fill one container and rice to fill another*? The children will use their prior knowledge of weight and length (height) to ensure that the conclusions they come to are 'fair'. The strand unit of Time can also be integrated. For example: *Does it take 'longer' to fill the basin when using a soup ladle or a bucket?*
- 'Free play' in the topic of Area is also an important stage. The children will experiment with objects that cover a greater or lesser/smaller amount of space. There is no need to use the word 'area' in a formal sense, but you may wish to use it informally. For example: *This book covers a greater amount of space or area.*
- Junior Infants judge the amount of space visually. Guided by you, they begin to apply rules of fairness by superimposing one object over another and aligning a corner of each object together.
- Using the appropriate language is key. For example: *The copy is on top of the book. The book covers more space because I can see the book underneath the copy.*
- The children will make various discoveries by engaging with their own belongings (erasers, sharpeners, lunch boxes, etc.) and items from the outside world such as cushion covers and pillowcases.
- The children will discover that large sheets of paper/flat objects are better for covering large areas; while small, flat, square or rectangular objects are better for covering small areas. They will begin to see the need for standard measurement and understand the need to choose the best option for measuring an object.

The theme of this unit is **The Ice Cream Parlour**.

# **Common misconceptions and difficulties**

- The children may think that when an amount of water contained in a short, round container is poured into a tall, thin container, the amount of water is greater (because the level is higher).
- They may think that when a shape is changed (e.g. cut in half and the pieces put back together), the area the shape covered has changed.
- They may become confused about language. For example: *Cover the copy with the book*. *Which one is underneath? Which one is on top?* (They may cover the book with the copy, instead of the other way round.)

The Unit 11 Let's Strengthen Suggestions for Teachers address the common misconceptions and difficulties listed above.

# Mathematical models and representations

Balance scale



# Day 1, Lesson 1

# **Empty and Full**

## Focus of learning (with Elements)

- Explores how measures help us to make sense of our world (U&C)
- Explores and identifies the different attributes (e.g. length: long/short, weight: heavy/light, capacity: full/empty) of a single object that can be measured (U&C)

## Learning experiences

- Digital activity: Inside the Ice Cream Parlour MAM Routines: Notice & Wonder, with Think-Pair-Share; Reason & Respond
- C Maths Stations: Exploring Containers MAM Routine: Reason & Respond
- Pupil's Book page 63: Empty and Full

## Equipment

- Plastic containers, such as tubs, jugs, cups, buckets and bowls (same and different sizes)
- Things that can be 'poured', such as sand, water, pasta, rice, and cubes/small manipulatives
- Large basin

## Maths language

• full, empty, nearly/almost empty, nearly/almost full, full to the brim, fill, pour

## Warm-up

## Digital activity: Inside the Ice Cream Parlour MAM Routines: Notice & Wonder, with Think-Pair-Share; Reason & Respond

Display the poster, in which the characters are in an ice cream parlour. Ask or click to play the questions below. Use the Zoom and Spotlight tools to focus on areas of the scene. Whenever appropriate, ask the children to give reasons for their response(s).

- Can you point to an ice cream tub that is empty?
- Can you point to an ice cream tub that is full?
- Which tub of ice cream is nearly empty?

- Look at the smoothie on the poster. Is it full to the brim?
- Look at Lexi's smoothie. What can you tell me about it?
- Are any jars of toppings empty?
- Are any jars of toppings nearly empty?
- Look at the cone on the counter. Is it full or empty?
- Is Dara's tub full or empty?
- Is Mia's ice cream tub full or empty?

## Main event

## Maths Stations: Exploring Containers MAM Routine: Reason & Respond

## **Teaching tip**

It is very important that the children engage in free play with the materials *before* being guided. This is an



opportunity for you to assess their prior knowledge of capacity and the concepts of capacity that they are discovering for themselves. If the weather is warm, take these activities outdoors. The children will all engage in an exploration of capacity but using different materials. For the five days of this week, you could rotate each group to a different station so that they experience the different materials. For example: Group 1 uses the sand area on Monday, Group 2 uses the sand area on Tuesday, and so on.

You might prefer to reduce the number of options below to three groups, for example, using manipulatives that can be 'poured'.

**Group 1:** Sand area, various containers (same and different sizes), dry and wet sand. (*Which type of sand is easier to 'pour'?*)

**Group 2:** Rice, various containers (same and different sizes).

**Group 3:** Pasta, various containers (same and different sizes).

**Group 4:** Cubes/small manipulatives (that can be 'poured'), various containers (same and different sizes).

**Group 5:** Large basin of water or sink, various containers (same and different sizes).

Ensure that the children are voicing and revoicing the language of capacity. For all groups, ask:

- Is this ... (e.g. cup/tub) full up to the brim? How do you know?
- If you pour all of the ... (e.g. water/rice) out of this cup, what can you say about it? (It's empty.)
- Is this tub full/nearly full/almost full/full up to the brim? What can you tell me about it?
- Can I fit more cubes into this tub or is it full?
- If I pour out *some* of the rice, is it still full?
- This jug is empty. If I put just a small amount of pasta into it, is it still empty?
- This bowl is nearly full. Is this *all* the water it can hold? Can it hold more water? Is it full now?
- What can you say about this tub of rice? (It's full to the brim.) Pour all the rice out of the tub, and into this jug. The tub is now ... (empty).
- Let's pour the rice back into the tub. Will the tub be full to the brim/this level again? Let's find out.

• Let's look at these two bowls (with nothing in them). They are ... (empty). Are they the same? Yes.

- How can we make one of these empty bowls different? (Fill it up with rice.)
- This bowl is full. Can you make the other bowl nearly/almost full?
- Can you make the two bowls the same? (e.g. both full or both almost full)
- Can you make one of these bowls *almost* empty?

Continue enabling the children to explore and compare full and empty (and nearly/almost full and empty).

## Let's deepen

#### Ask/say:

- What can you tell me about these two empty cups? (They are the same size.) Fill up one cup with rice. If you pour the rice into the other cup, will it be full? Let's find out.
- This cup is empty, this one is nearly empty, and this one is full. Can you put them in order, starting with the empty one?

Pupil's Book page 63: Empty and Full



# **Optional consolidation and extension possibilities**

**Role Play** Set up an ice cream parlour with cups and tubs of various sizes. You could use cotton wool for ice cream and small manipulatives for toppings. The children role-play servers and customers (who make various requests).

**Video** Play this *Sesame Street* video about empty and full: edco.ie/u35t

Maths Eyes Ask the children to look around the classroom and spot things that are full/empty/nearly empty/almost full/full to the brim (e.g. bowls of crayons, tubs of cubes, bottle of water, pencil case, school bag, box of building blocks).

**Story** Read *Goldilocks and the Three Bears* or listen to a reading at edco.ie/m726

Notice how Baby Bear ends up with an empty bowl instead of a bowl of porridge.

**Filling Mats** (Integration with PE) Place five or six mats in the PE hall. When you shout 'full', the children'fill' a mat by standing, sitting or lying on it. The children who are on a mat that is not 'filled' (i.e. there are only a few children on it) are out. Take away or add mats as needed. Keep shouting 'full' until you end up with one mat filled by the group who wins the game.

**Story** Read *Big Red Bath* by Julia Jarman or listen to a reading at: edco.ie/s9vz

## Unit 11: Measuring 2

## Day 2, Lesson 2

# **Comparing Two Identical Containers**

### Focus of learning (with Elements)

- Recognises that to be accurate, measurements must be fair (U&C)
- Uses appropriate vocabulary to describe and then compare measurable attributes (C)

#### Learning experiences

- Digital activity: At the Cinema Shop MAM Routines: Notice & Wonder, with Think-Pair-Share; Reason & Respond
- C Maths Stations: Comparing Identical Containers *MAM* Routines: Reason & Respond, with Think-Pair-Share

#### Equipment

- Two each of same-sized plastic cups, tubs, buckets and bowls
- Things that can be 'poured', such as sand, water, pasta, rice and cubes/small manipulatives
- Funnel
- Scoop
- Spoons and ladles
- Balance scale

## Maths language

#### holds the same

## Warm-up

## Digital activity: At the Cinema Shop MAM Routines: Notice & Wonder, with Think-Pair-Share; Reason & Respond

Display the poster, in which the characters are buying things at the cinema shop. Use the Zoom and Spotlight tools to focus on areas of the scene. Click to play or ask:

- What can you tell me about the popcorn tubs?
- Does every tub hold the same amount of popcorn?
- If Lexi and Mia both get a tub of popcorn, will they both get the same amount?

- Does the tub of popcorn hold the same amount as the tub of ice cream?
- Are the sparkling water bottles the same size?
- Are the water cups the same size?
- If Lexi and Jay both fill up their cups at the water tap, will they get the same amount of water?
- Is Dara's water cup full or empty?
- If Lexi fills her cup and pours it into Dara's cup, will it be the same amount of water?
- If Dara and Jay both get a tub of ice cream, will they get the same amount?

## **Main event**

Maths Stations: Comparing Identical Containers MAM Routines: Reason & Respond, with Think-Pair-Share

## **Teaching tip**

Conservation of capacity is a concept that young children acquire over time. Assess whether they can predict that



station, so that they all experience the different materials. For example: **Group 1:** Sand area, various containers (same and

Remember to rotate each group to a different

different sizes), dry and wet sand. (Which type of sand is easier to 'pour'?)

**Group 2:** Rice, various containers (same and different sizes).

**Group 3:** Pasta, various containers (same and different sizes).

the amount of rice poured out of the tub will come up to the same level when it is poured back in again. **Group 4:** Cubes/small manipulatives (that can be 'poured'), various containers (same and different sizes).

**Group 5:** Large basin of water or sink, various containers (same and different sizes).

For all groups, ask:

- What can we say about these two buckets? (They are the same size.)
- Will this one hold more/less sand? Will they hold the same amount?
- Fill up this bucket with sand. If you pour the sand into the other bucket, will it all fit? How do you know?
- If the sand doesn't fill the other bucket, what happened? Did some sand fall out when you were pouring?
- How can we make this fair? (We need to be careful when pouring.)

Fill two identical cups with pasta.

• Do the two cups hold the same amount of pasta? Are they both full?

Place two identical, but empty, containers beside the cups of pasta.

 If you pour the pasta from each of your cups into these two cups, will they both be full? Let's find out.

Fill two identical containers with water.

- Do they hold the same amount? (Yes.)
- Would this work? If I put my hand into one of the containers, will there still be the same amount of water in the two containers? (Some water comes out.)
- Can the containers still hold the same amount? (You are exploring the children's understanding of the conservation of water. There is no need to dwell on this aspect; you are only helping the children to discover the concept.)

Continue with various containers that are the same size, using different materials (e.g. rice, pasta, cubes, links, water). Some children may realise that one cup holds, for example, eight *cubes*, but an identical cup holds ten pieces of *pasta*.

Think-Pair-Share: Which is heavier? Ask:

- If you put cubes in your container and Saleem puts rice in his container, which container will be heavier?
- How will you find out?

To find out, the children weigh the two containers in their hands or use the balance scale. They then share their findings with the class.

Think-Pair-Share: Using two identical containers, each child takes a handful of rice and places it in one of the containers. Ask:

- Which container has more rice?
- Were the two *handfuls* the same?
- Is the *height/level* of the rice the same in the two containers?

The children share their findings with the class.

## Let's deepen

Ask:

• How many handfuls can fit in each container?

## **Teaching tip**

You could leave a funnel near where children are using rice or water. Do they use the funnel independently of your guidance, discovering that it makes pouring easier and more accurate?

### Let's deepen

To find out if two containers hold the same amount, the children might use, for example, a cup to fill one tub; and a spoon, eggcup or scoop to fill a second, identical tub. The children count and record the amount of 'cups full' and 'spoons full' in order to discover that they need a greater amount of smaller 'measures' to fill the second container of the same size.

# **Optional consolidation and extension possibilities**

**Story** Read *Mr Archimedes' Bath* by Pamela Allen or listen to a reading at: edco.ie/g7ds Mr Archimedes is puzzled. When he climbs into his bath, the water spills out! And when all his friends climb in, even more water spills out! What is happening? **Role Play** The children set up a cinema shop with containers for popcorn, drinks cups, etc.

## Day 3, Lesson 3

# **Comparing Different Containers**

## Focus of learning (with Elements)

- Describes and discriminates between items using appropriate comparative language (C)
- Explores various materials used to compare the attributes of length, weight, capacity and area (A&PS)

#### Learning experiences

- Digital activity: The Ice Cream Parlour MAM Routine: Reason & Respond
- Maths Stations: Comparing Different Containers
- Pupil's Book page 64: Comparing Different Containers

#### Equipment

- Plastic containers, such as tubs, jugs, cups, buckets, bowls (large and small)
- A selection of pairs of containers (e.g. one tall and thin, the other short and round)
- Things that can be 'poured', such as water, pasta, rice and cubes/small manipulatives
- Funnel
- Scoop
- Spoons and ladles
- Balance scale

## Maths language

There is no new maths language for this lesson.

## Warm-up

## Digital activity: The Ice Cream Parlour MAM Routine: Reason & Respond

Display the flipcard tool, which compares and discusses different-sized containers (cones, tubs, cups). Some of the



containers will be obvious in terms of the difference in how much they hold. The difference in capacity will be less obvious with other containers.

Ask the class to consider the containers on each card. Ask them to decide whether the containers can hold:

- More
- Less

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Same (Snap!)

When the class have made a decision, turn the card(s) to reveal the answer. Click the 'Replay' button for a new set of cards.

## **Teaching tip**

Most children will automatically think that the tall, thin cone/tub/container will hold more than the short, round one. They will discover that sometimes the tall, thin container holds *less* than the short, round one – or that it holds the same amount. In particular, notice if the children think the capacity of the taller container is greater because the *level* of sprinkles, for example, is higher than in the short, round container. You are assessing the children's understanding of this key concept.

## Main event

#### **(C)** Maths Stations: Comparing Different Containers

Continue to observe the children's understanding of the key concept mentioned above, but now using concrete materials. Try to rotate each group to a different station, so that they all experience the different materials. For example: **Group 1:** Sand area, various containers (same and different sizes), dry and wet sand. (*Which type of sand is easier to 'pour'?*)

**Group 2:** Rice, various containers (same and different sizes).

**Group 3:** Pasta, various containers (same and different sizes).

**Group 4:** Cubes/small manipulatives (that can be 'poured'), various containers (same and different sizes).

**Group 5:** Large basin of water or sink, various containers (same and different sizes).

You might wish to use one type of material (e.g. rice) with two groups. For all groups, ask:

- Look at these two tubs (one large, one small). What can you tell me about them? Which one will hold more? Which one would you prefer? Let's find out if you are right. How will we find out?
- What can we say about these two tubs? (One is tall/thin, the other is short/round.)
- Which one *do you think* will hold more rice? Why?
- Will they hold the same amount? Why/Why not?
- How will we find out? (Fill up the thin one with rice. Pour the rice into the short one.)

## **Teaching tip**

To find out if two different containers hold the same amount, the children might use a smaller measure (e.g. small cup, spoon, scoop or ladle) to fill *both* containers. They count and record the number of 'spoons full'.

- Does all the rice fit? Were you correct?
- What about these two different-sized buckets? Which one will hold less/more? Will they hold the same amount of pasta?
- Fill up this tall beaker with rice. Now, look at this short, round tub. Will the rice in the beaker fit in the tub? Will there be too much rice? Why do you think that?

- Fill up the short, round cup with pasta. Fill up the tall, thin cup with pasta. Which one do you think holds more? The tall, thin one? Why? (Because the pasta is 'higher'?) Let's find out which one holds more. (Pour the contents of both into identical containers or count the 'spoons full'.)
- How can we make this fair? (We need to be careful when pouring.)
- Fill up these two different-sized jugs with cubes. Are the two jugs full?
- Do these two jugs hold the same amount? How do we know? How could we find out? (Pour the cubes from the tall jug into one tray of the balance scale. Pour the cubes from the short container into the other tray.) Do they balance?
- What would happen if we put rice in one container and pasta in the other container?
   Would that be fair? Why/Why not? Let's try that!
- Do we know which container holds more? Was it a fair competition/test?
- Continue with containers of various sizes, using different materials (e.g rice, pasta, cubes, links, water).
- Pupil's Book page 64: Comparing Different Containers



# **Optional consolidation and extension possibilities**

**Role Play** The children set up a sweet shop with jars of 'sweets' (manipulatives). The customers choose between containers of different sizes. Which containers will hold the most sweets?

Maths Eyes Ask the children to look around the classroom. Can they see two containers that are different sizes? Which one do they think will hold more? You could make a 'data chart' of their answers by drawing the two containers on the IWB. How many children think Container 1 holds more? How many children think Container 2 holds more? 'Measure' the capacity of each, and see which group was right. **STEM** Ask the children to fill different moulds (e.g. ice-pop moulds or balloons) with water, orange juice or coloured water. Put the moulds in the freezer in the staffroom. When frozen, show the children how water takes on the shape of the mould.

**Story** Read *Chocolate Mousse for Greedy Goose* by Julia Donaldson or listen to a reading at: edco.ie/ckmv

## Day 4, Lesson 4

# **Comparing Similar Containers**

## Focus of learning (with Elements)

- Predicts how measurable attributes of objects will compare to each other (R)
- Compares and orders objects, containers and surfaces according to appropriate measurable attributes (A&PS)
- Makes direct comparisons of objects, containers or surfaces to compare measurable attributes and develop an understanding of same (U&C)

#### Learning experiences

- Digital activity: At the Dog Park MAM Routine: Reason & Respond
- Maths Stations: Comparing Similar Containers

#### Equipment

- Containers, trays, paper plates and boxes (small, medium and large)
- Things that can be 'poured', such as water, pasta, rice and cubes/small manipulatives
- Lego bricks
- Egg cups
- Counters or rings
- Funnel
- Scoop
- Spoons and ladles
- Balance scale
- Monty the puppet

### Maths language

small, medium, large

## Warm-up

#### Digital activity: At the Dog Park MAM Routine: Reason & Respond

Play the multiple-choice activity, which shows Monty at the dog park with Lexi and Dara. Click to play the audio question for each set of water bowls. Ask the children to help the characters decide which of the water bowls would be the best size for Monty, which would take the longest to fill and which would hold the least amount of water.

Use Monty the puppet to try out some real-life 'water bowls' from your selection of containers. Which suits Monty best? Which holds the most water?

## **Main event**

#### Maths Stations: Comparing Similar Containers

## **Teaching tip**

Assess whether the children have some understanding of 'fairness' when 'measuring'. Do they appreciate the

need for 'fairness'? Can they see how some measuring activities might not be fair?

Try to rotate each group to a different station, so that they all experience the different materials. For example:

**Group 1:** Sand area, various containers (same and different sizes), dry and wet sand. (*Which type of sand is easier to 'pour'?*)

**Group 2:** Rice, various containers (same and different sizes).

**Group 3:** Pasta, various containers (same and different sizes).

**Group 4:** Cubes/small manipulatives (that can be 'poured'), various containers (same and different sizes).

**Group 5:** Large basin of water or sink, various containers (same and different sizes).

For all groups, show the children two containers of similar capacity (e.g. one just slightly bigger/smaller than the other), and ask:

- Look at these two tubs. Which one do you think holds the most? Or will they hold the same amount?
- Can you predict/tell me which one will hold more?
- How will we find out? (Fill up one tub with water. Empty it into the other tub.)
- Look at these two boxes. Which one will hold more/less cubes?
- What is another way of finding out? (Use the balance scale.)
- Is there another way? (Count handfuls of cubes or large building blocks, for example. How many handfuls to fill each container?)
- Will your handful be the same as my (teacher's) handful? Does your hand hold more than mine? Why not?
- Is this a fair way of measuring?
- If you use different materials, such as rice in one container and cubes in the other, would that be fair? Why not?
- Use three containers: small, medium and large. (You could use three *bowls* and link this to the story of 'Goldilocks and the Three Bears'.) Which container holds the most/least? What about this container (the medium one)? Fill up the containers and find out. Can you put them in order?

The children find their own containers of similar capacity, compare them, and voice and revoice their choices and discoveries.

## Let's deepen

## Would This Work?

• Is there another way of finding out which container holds more? Could you use a smaller container (e.g. an egg cup) and count the amount of times the egg cup is filled in order to fill the first container?

Repeat with the second container. The children might record the amounts. (Amounts should be no more than ten.)

Ask/say:

- Look at these three bowls. Are they all the same size?
- Does one bowl fit into the other? Which one is on the top? Which one is on the bottom? Which one is in the middle?
- Will they all hold the same amount of 'cereal' (pasta)? How will we find out? (Some children might count the materials/pasta if the amount is under ten. Others will judge 'by eye'.)
- Can you put them in order? How will you do that? (They should decide on smallest to biggest, or biggest to smallest.)

Say/ask:

- Here are two trays/paper plates. Which one will hold more cookies? (You could use counters, rings or cupcake cases.)
- Guess first. (Or estimate by putting a few 'cookies' on each tray/plate.)
- Count the cookies on one tray/plate. Count the cookies on the other tray/plate. Which one has more cookies?
- If I was going to make cookies for the whole class, would this size tray be big enough?
- The children can record their findings on their MWBs or in their maths journals.

# **Optional consolidation and extension possibilities**

**Think-Pair-Share** The children compare handfuls of cubes or large bricks. Whose hand holds more? Can they hold more cubes or more bricks? They share their findings with the group/class.

**Role Play** The children role-play the scene from the dog park, using small-world/toy dogs/animals and assigning bowls of different sizes.

**Maths Eyes** Can the children spy any small and large containers in the classroom (e.g. at the group table for lunch/break)?

**Story** Read *Maisy Goes Camping* by Lucy Cousins or listen to a reading at: edco.ie/mq4d Five friends set up their tent, but is it big enough

to hold them all ... especially when one of the friends is an elephant?

## Day 5, Lesson 5

# **Selecting Suitable Containers**

## Focus of learning (with Elements)

- Chooses an object from a group of objects for a purpose based on a particular attribute (A&PS)
- Listens to and responds to a range of stories and rhymes involving concepts of measurement (C)

#### Learning experiences

- Digital activity: Selecting Suitable Containers MAM Routine: Reason & Respond
- Maths Stations: Selecting Suitable Containers
- Pupil's Book page 65: Selecting Suitable Containers

#### Equipment

- Containers, trays, paper plates and boxes (small, medium and large)
- Things that can be 'poured', such as water, pasta, rice and cubes/small manipulatives
- Items from the Play Area, such as teddies and dolls
- Funnel
- Scoop
- Spoons and ladles
- Egg cups
- Balance scale
- Monty the puppet

## Maths language

There is no new maths language for this lesson.

## Warm-up

## Digital activity: Selecting Suitable Containers MAM Routine: Reason & Respond

Play the multiple-choice activity. The children will see different sets of containers and must decide which

container is suitable to perform a specific task (e.g. fill a paddling pool). Click to play the audio question for each set of containers and encourage the children to justify their answers.

## Main event

#### G Maths Stations: Selecting Suitable Containers

The children are initially 'visualising' which container will be the most suitable. They are then testing their predictions. Assess whether some children are having difficulty visualising and are struggling to make reasonable predictions.



Remember to rotate each group to a different station, so that they all experience the different materials. For example:

**Group 1:** Sand area, various containers (same and different sizes), dry and wet sand. (*Which type of sand is easier to 'pour'?*)

**Group 2:** Rice, various containers (same and different sizes).

**Group 3:** Pasta, various containers (same and different sizes).

**Group 4:** Cubes/small manipulatives (that can be 'poured'), various containers (same and different sizes).

**Group 5:** Large basin of water or sink, various containers (same and different sizes).

Show the children a small box/container, a large box/ container and a Monty the puppet. Ask:

- Will this Monty fit into this small box? How do you know?
- Which box will he fit into? How do you know?
- Will only one Monty fit into this box?

As the groups are exploring the equipment listed above, ask:

- What will you use to fill this jug: a big cup, a small cup, an egg cup or a spoon?
- Why did you choose the big cup?
- What will you use to fill this egg cup: a big cup, a small cup or a spoon?
- Why did you choose a spoon?
- What will you use to fill the basin? What will you use to fill the egg cup? Why did you choose different objects to fill the basin and the egg cup?
- Fill up the dish with water. How could you take the water out and put it into this jug (without pouring)? (Use another container/other containers. Some children might suggest using a sponge!)
- Fill up the bowl with rice. What could you use to take the rice out and put it into this tub? What would be the quickest way?
- Taj is very, very thirsty. Which of these cups will we use to give her a drink of water?
- Emily is not very hungry. Which bowl of pasta will we give her?
- Choose a bowl for each of the Three Bears (small, medium, large). Which object will you use to fill each bowl? Will you use the same object to fill the small bowl and the large bowl? Why/Why not?

Think-Pair-Share: Tell each child to choose a container that they think will hold more (than their partner's container). Ask:

- Can you predict/guess which container will win?
- How will you find out who wins?
- How will you make this a fair test?

Using the same material (e.g. rice), they pour the contents of one container into the other.

Alternatively, they could use two identical containers, and pour the contents of each child's chosen container into one of the identical containers; or they could use a smaller object to count (e.g. in 'spoons full'). They share the results of their competition.

## Let's deepen

## Say/ask:

 If you fill the big bowl using the spoon, and Conor uses a cup, who will take longer to fill it/ fill it first? Let's find out!

Say/ask:

- You have one big bowl of pasta. There are two smaller bowls beside you. How will you share the pasta into the two smaller bowls? What object will you use? Will you need to use the balance scale?
- How will you make sure that it is fair?

Think-Pair-Share. Say/ask:

- You are using a soup ladle to fill the small bowl, and Karim is using a spoon.
- Count the amount of times you use your ladle/ spoon. Record your findings and share them.
- Will Karim need more 'spoons full' to fill the bowl? Why?

Pupil's Book page 65: Selecting Suitable Containers



# **Optional consolidation and extension possibilities**

**Maths Eyes** Look around you. Which object would be best for filling the sink? Would a spoon work? Why not? What might work better? Why?

**Story** Read *The Flying Bath* by Julia Donaldson or listen to a reading at: edco.ie/hwt8

Home/School Links Book Page 28 can be completed any time after this lesson.

## Day 6, Lesson 6

# **Areas of Different Objects**

## Focus of learning (with Elements)

- Listens and responds to a range of stories and rhymes involving concepts of measurement (C)
- Uses appropriate vocabulary to describe and then compare measurable attributes (C)
- Compares and orders objects according to length, containers and volumes according to capacity, and surfaces and shapes according to area (U&C)

## Learning experiences

- Class discussion: What it Means to Cover Something
   Concrete activity: Exploring How Much Space
   Objects Cover
- Pupil's Book page 66: Areas of Different Objects

## Equipment

- Shop items, such as cereal boxes
- Games boxes
- Picture books
- Strips of paper and/or lengths of ribbon (different lengths)
- A4 sheets of paper
- Scissors
- Sticky tape
- Monty the puppet

## Maths language

cover, covers the most space, covers less space/smaller amount of space

## Warm-up

## Class discussion: What it Means to Cover Something

## **Teaching tip**

Prompt the children to voice their findings. For example: 'My lunch box covers more space than my hand.' It is



covers more space than my hand.' It is Opportunities easy for children to become confused about the order of the objects, and say, for example: 'My hand covers more space than my lunch box.' This may not be what they *mean*, but it is what they articulate. Assess whether some children are having difficulty using the language accurately.

Tell the children that we are going to talk about a new word: *cover*. Ask:

- Does anyone know what the word 'cover' means?
- Let's look at one of our hands. What can it cover? How much space can it cover?
- Does my hand cover more space than your hand?
- Can your hand cover your eye? Can your partner still see your eye?

- Is your hand good for covering your eye?
- What else can your hand cover? (ear, nose)
- Can you cover your whole face with your hand? Why not?
- Would Monty cover your face/hand/table?
- Let's look around. What is on your table? (a book)
- Can your book cover your whole table? Why not?
- Can your book cover your face?
- Which covers the most space: your book or your hand?
- Which covers a smaller amount of space?
- Can you see something that covers a large amount of space? (carpet/rug in the Play Area, large poster)

## Let's strengthen

The children may need to compare objects whose difference in area is more obvious (e.g. a sheet/ blanket from the Play Area and a copy).

## Main event

## Concrete activity: Exploring How Much Space Objects Cover

Continue with the same type of questions from the warm-up, applying them to different objects on the children's tables (e.g. eraser, sharpener, pencil case, lunch box). Add additional objects, such as cereal boxes, games boxes, picture books, strips or paper and/or lengths of ribbon. Ask:

- Which ribbon or paper strip covers the most space? (the long one, the wide one)
- Which covers the most space: the picture book or the cereal box?
- Can you find an object that covers more/less space than the lunch box?
- Can you find two objects that cover more/less space than the lunch box?

The children record their findings on their MWBs or in their maths journals.

## **Teaching tip**

At this stage, the children are judging the different amounts of space taken up by objects by eye, because the objects are *obviously* different in area. In Lesson 7, they will apply 'fairness' to judge which one of two objects of similar size has a greater area. Some children may already notice that it is difficult to compare the area of two objects by eye. Prompt them to find a solution (e.g. placing one object on top of the other).

## Let's deepen

## Ask:

- Which covers the most space: your book, your pencil case or your hand?
- Can you find something on your table that covers a greater amount of space than your pencil case?
- Can you find something that covers a smaller amount of space than your pencil case?

#### Think-Pair-Share:

Distribute scissors, sticky tape and two A4 sheets of paper to each pair. Ask:

• Which sheet of paper covers more space? (They both cover the same amount of space.)

Tell each pair to position their sheets of paper so that one is horizontal, and the other is vertical. Do the children realise the area covered is still the same? Ask one child in each pair to cut their sheet of paper in half or cut a piece off, then push the two pieces together.

Ask:

• Does the paper still cover the same amount of space?

Ask the children to stick the pieces together (they will need help), and again, ask:

• Does the paper still cover the same amount of space?

The children share their findings with the class.

## Let's deepen

The children put three objects in order, according to how much space they cover (e.g. a large picture book, a small handwriting book and an eraser).

Pupil's Book page 66: Areas of Different Objects



# **Optional consolidation and extension possibilities**

**Geoboards** Distribute a geoboard to each child. The children work in pairs. Child A makes a square on their geoboard, and challenges Child B to make a square that covers either more space or less space on their geoboard. They show their completed squares to the group, and then swap roles.

**Story** Read *Grandpa's Quilt* by Betsy Franco or listen to a reading at: edco.ie/my86 Grandpa loves his red and yellow quilt but it doesn't quite cover his toes! Maybe his grandchildren can help.

Home/School Links Book Page 29 can be completed any time after this lesson.

## Day 7, Lesson 7

# **Making Fair Measurements**

## Focus of learning (with Elements)

- Recognises that to be accurate, measurements must be fair (U&C)
- Predicts how measurable attributes of objects will compare to each other (R)
- Explores various materials used to compare the attributes of length, weight, capacity and area (A&PS)

Learning experiences	Equipment
<ul> <li>Video: Making Fair Measurements MAM Routine: Reason &amp; Respond</li> <li>Concrete activity: Measuring Objects Fairly</li> </ul>	<ul> <li>Pillowcases and cushion covers</li> <li>Maths/phonics/handwriting books, English readers and copies</li> <li>Envelopes, sticky notes of different sizes, sheets of newspaper and A4 sheets of paper</li> <li>Lids of various shapes and sizes (e.g. from jars, sweet tubs and biscuit tins)</li> <li>Strips of paper and wallpaper, and lengths of ribbon (different lengths)</li> <li>2-D shapes (different sizes)</li> </ul>

## Maths language

corners, rim (of a lid), stack

## Warm-up

## Video: Making Fair Measurements MAM Routine: Reason & Respond

Play the video. The children predict which of two picture books covers the most space. How will they know they are correct, and that they have made a fair decision? (The smaller book must be placed on top of the larger book, corner over corner.) Ask the children what should be done if the two objects are circular (e.g. two circular lids). (The smaller object should be placed on top of the larger object, with part of the rim of the object aligned with the other.)

## Main event

#### Concrete activity: Measuring Objects Fairly

## **Teaching tip**

You might like to enlist the help of your SNA (if you have one), as there is a lot of teacher-led discussion in this activity. You might also prefer to reduce the amount of different equipment being used, or rotate equipment between groups.

In comparing some objects, it will not be obvious which covers a greater area (e.g. a wide pillowcase and a long, narrow cushion cover). This will be an opportunity to guide the children towards the realisation that non-standard (and eventually standard) measurements will be required. Assess whether the children realise that there is a difficulty with making the comparison and if they can articulate the reason. Distribute the equipment as follows:

Group 1: Books and copies

**Group 2:** Sheets of newspaper, A4 sheets of paper, envelopes, sticky notes

- Group 3: Strips of paper and wallpaper, ribbons
- Group 4: Pillowcases and cushion covers

Group 5: Lids of containers

You might like the children to work in pairs. Tell them to choose two objects, and ask:

- Which object do you think covers more space?
- How do you know which object covers more space? How will you find out?

If the two objects are books, guide the children towards making the 'measurement' fair.

- How will you compare these two books? (Put one on top of the other, i.e. stack them.) Which one should go on the top/bottom?
- Do the two books need to be 'straight' (the top one aligned with the bottom one)? Where will you put the top book? (Start at equivalent points; align the top or bottom corner of the book on the top with the top or bottom corner of the book on the bottom.)
- Is this fair (a fair measurement)? How do you know?
- Look at these two lids. How do we know which one covers more space?



• Do the lids have corners? (Optional: What do we call the outside of the lid? The rim.) How could we make this measurement fair? (Align the rims.)



• Look at this cushion cover and this pillowcase.



 Which one covers more space? How will we make this fair? (Place one on top of the other and line up a corner of each.)



## **Teaching tip**

Use questions of the same type for the strips of paper, ribbons, sticky notes, etc. Remind the children to use 'fair' measurements. When using ribbons/strips of paper, there is an opportunity to revise length: *Which one is longer/shorter*?

It is very important that the children voice what they are doing in order to understand what 'covering' actually means. They also need to understand the task you might be asking them to complete. For example: If you ask them to cover the pencil case with the book, do they misunderstand and cover the book with the pencil case?

## Let's deepen

#### Ask:

- Which of these three objects (e.g. picture book, copy and maths book) will cover the most space? How will we find out? (Take two of the books and put one book on top of the other to see which one covers more space, and then put the 'winning object' on top of the third book. Or stack the three of them on top of each other and observe which bits we can still see, but make it fair by starting at the corners.)
- How many objects (e.g. books, copies, envelopes) that cover the same amount of space can you find? How will you find out? (Stack them, align the corners and see if there are any 'overlapping', i.e. pieces left 'sticking out'.)

The children could explore the area of 2-D shapes. They could start with squares, comparing two sizes by stacking, then aligning corners to find out which square covers a greater/lesser area. Next, they could explore two circles by aligning the rims. Moving on to rectangles, they could align, for example, a 'taller' one and a 'wider' one. They might discover that two rectangles together cover one bigger rectangle. They could engage with equilateral triangles, comparing their area.

Would This Work? Can the children compare non-equilateral triangles? They may realise that these are difficult to compare and, again, see the need for an alternative to visual comparisons and superimposition.

# **Optional consolidation and extension possibilities**

**Comparing Mats** If you have mats of equal size in the PE hall, give two to each group, placing one in a vertical position and the other in a horizontal position. Ask each group which mat they think covers the most space. How will they find out? You might place one mat *across* the other and ask: *Is this fair?* The children put one mat on top of the other and align all the corners to discover that the mats have the same area. You could then play 'Musical Mats' (see Games Bank). Maths Eyes Can the children find objects in the classroom that cover the same amount of space? Do they notice that, when stacked, a bundle of copies/ activity books (with corners aligned and no copy or book 'sticking out') covers the same amount of space as a single copy/activity book?

**Games Bank** Play 'Musical Mats' from the Games Bank.

## Day 8, Lesson 8

# **Ordering by Area**

## Focus of learning (with Elements)

- Describes and discriminates between items using appropriate comparative language (C)
- Compares and orders objects, containers and surfaces according to appropriate measurable attributes (A&PS)
- Selects and uses suitable materials for comparing (A&PS)

## Learning experiences

Digital activity: Ordering by Area MAM Routine: Reason & Respond

Concrete activity: Ordering Pieces of Fabric by Area

## Equipment

- Pieces of fabric, such as from old tea towels, towels, bed sheets, blankets and dishcloths
- 2-D shapes

## Maths language

There is no new maths language for this lesson.

## Warm-up

## Digital activity: Ordering by Area MAM Routine: Reason & Respond

Display the flipcard tool, which compares differentsized objects (quilts, blankets, towels) and asks how much space each one takes up. Show each set of objects, one by one, and play the audio question. Allow the children time to decide which one they think covers the most space and to give reasons for their answers. Flip each card to reveal the answer, showing the objects stacked on top of each other with their corners aligned.

## Main event

## Concrete activity: Ordering Pieces of Fabric by Area

This is an opportunity to assess the children's understanding of the concept of area. Do they understand and can they



use the following language: cover; space; put one on top of the other; which one is on the bottom/top? Do they recognise the difference in area of two objects of very similar area (e.g. a copy and a book)?

Do they know how to superimpose one object onto another correctly?

Distribute a range of pieces of fabric to each group, ensuring that some will cover a small area and others will cover a large area. Say/ask:

- Choose three pieces of fabric. Which piece covers the most space?
- Which piece covers the least amount of space?
- Which piece is 'in the middle'?
- Is your measurement fair? Stack the pieces.
   Which piece will you put on the bottom? Which piece will go next/on top of the first piece?
- Can you see some of the piece on the bottom sticking out?
- Do you need to move the pieces around to see which one covers the most space?
- Can you put the pieces in this order on your table: the one that covers the most space, the middle one, the one that covers the least space?
- Can you tell your partner what you have found out? Can your partner tell you what they have found out?
- Choose two pieces. Which piece covers the most space? Can you find a piece that covers even

*more* space? Can you put them in order? Compare each of your three pieces to your hand. Which piece covers more space than your hand? Can you put the pieces and your hand in order?

• Which piece in your group covers the most space? Hold it up. (Each group does the same.) Now, which of these ... (all of the groups' pieces held up) covers the *most* space?

Using an old bed sheet (or drawing paper) cut up into small pieces, the children could draw or paint a pattern on their 'quilt'.

Ask the children to find a piece of fabric that covers a large amount of space and one that covers a small amount of space. Can they find a piece that will go 'in the middle', and then put the three pieces in order?

## Let's deepen

The children could explore 2-D shapes further by ordering three of the same shape in different sizes. Ask the children to choose a shape that covers a large space, and another of this shape that covers a small space. Can they find another of this shape that will fit 'in the middle'?

# **Optional consolidation and extension possibilities**

**Visual Arts** Ask the children to each bring in a cardboard box (e.g. cereal box or rice box) from home. They paint or draw a face on their box. Which face/box covers the most area? (Start by asking which box among those of three children, then ask which box within a larger group, and then ask which box within the class.)

**Maths Eyes** Tell the children to choose an object in the classroom or give them an envelope or sticky notes. They find three items that cover either a *greater/smaller* amount of space than their object or envelope does, and then put the three items in order.

**Leaves** Ask the children to bring in leaves of different sizes. (You might have to bring some in also.) Help the children to discover that comparing

the area of leaves is not that easy.

**Dinosaur Footprint** Draw a dinosaur footprint on the floor or use masking tape to make the outline. The children compare their foot size to that of the dinosaur.

**Animal Footprints** Distribute scissors and a copy of the Unit 11 Let's Strengthen PCM to each child. Ask the children to choose three footprints from the PCM, cut them out and compare/order the area covered by each.

**Colour the Grid** Distribute a copy of the Unit 11 Let's Deepen PCM to each child. The children figure out how the patterns fit into the grids.

## Day 9, Lesson 9

# **Choosing the Correct Object**

## Focus of learning (with Elements)

- Chooses an object from a group of objects for a purpose based on a particular attribute (A&PS)
- Describes and discriminates between items using appropriate comparative language (C)
- Makes direct comparisons of objects, containers or surfaces to compare measurable attributes and develop an understanding of same (U&C)

#### Learning experiences

Class discussion: Choosing the Correct Object Concrete activity: Making up Parcels at the Post Office

#### Equipment

- Strips of paper or lengths of ribbon
- Sheets of wrapping paper, brown paper or newspaper (different sizes)
- Scissors
- Items from the Play Area to be used as 'gifts'
- Optional: sticky tape, string, ribbon, sticky labels and stickers ('stamps') to be used for finishing parcels
- Monty the puppet

## Maths language

overlapping, gaps

## Warm-up

#### **Class discussion: Choosing the Correct Object** $(\mathbf{C})$

This is an opportunity to assess and revise the children's understanding and use of the language that pertains to area and the Opportunity positional language that accompanies it. Ask:



- Can you cover the top of your head with your hand? What would be good for covering the top of your head? (a hat)
- Can your hand cover your table? Why won't your hand cover your table? (too small/not big enough)
- Is your maths book better at covering the table? Does it cover the whole table?
- Can you still see a large amount of the table?
- What would be a good object to cover the whole table? (newspaper, blanket, coat)
- Let's try covering a table with a coat. Does it do a good job? Can we still see the table?

- Let's try covering this copy with Monty. Is Monty a good object to cover the whole copy? Why or why not?
- Would your teacher's coat work better? Why?
- Would this strip of paper/ribbon be good for covering your table/book? Which ribbon would work best: the wide one or the narrow one; the short one or the long one?
- Can you see anything in the classroom that is covered? (Play Area covered by a rug, wall covered with posters, art area covered with newspaper)
- Are these objects doing a good job of covering the space?
- Can you see anything outside that is covered? (bicycles covered by shelter, shed/building covered by roof, area with swings covered by mat, footpath covered by concrete)

## Main event

## Concrete activity: Making up Parcels at the Post Office

Distribute sheets of wrapping paper/ brown paper/newspaper, scissors and items ('gifts') from the Play Area to each group. The children role-play wo



each group. The children role-play working at the post office, and make choices about the area of paper required to cover gifts of different sizes. They begin by choosing a gift to wrap. (They could work in pairs, with Child A as the customer with a gift to be wrapped, and Child B doing the wrapping. The children could then switch roles.) Ask:

- Hold up the gift that you are going to wrap. (They may realise that wrapping a box is easier than wrapping a doll.) How much space does your gift cover: a lot of space or a small amount of space?
- How much wrapping paper will you need for your gift?
- Put your wrapping paper on the table. Where will you place your gift on the wrapping paper? (They place it in the middle, so that they can judge how much paper they will need.)
- Have you got too much paper for your gift? Is the paper 'overlapping' too much? Do you need to cut off some of the paper?
- Have you got too little paper for your gift? Are there 'gaps'? Do you need a bigger sheet of paper?

**Optional extension:** If you have enough helpers in your classroom, distribute sticky tape, string, ribbon, sticky labels and stickers ('stamps'). Ask:

- Are you ready to stick the paper together?
- Will you put string or ribbon around your parcel?
- Have you got your sticky label? Where will you stick it?
- Have you got your stamps? Where will you stick them?

When the children have completed the parcel activity, they could explore the sizes of the various sheets of paper they were given. Ask:

- Which pieces of paper would be best for covering your table?
- Which pieces would be best for covering your book/copy/lunch box?
- How will you find out?

## Let's deepen

## Ask:

- Could you use a *few* pieces of paper to cover your table? Which ones would you use?
- Are some pieces of paper 'overlapping'? Are there some gaps?
- How many pieces of paper did you use to cover your table?
- Did all the pieces cover the same amount of space?
- Would it be better if all the pieces of paper were the same size/covered the same amount of space?

The children could 'experiment' with using two objects of different sizes to cover their table (e.g. playing cards and copies). Which object covers the table faster/more easily: the cards or the copies? Why?

## **Teaching tip**

The children might discover for themselves that a large object is good for covering a large area and a small object is good for covering a small area. If necessary, you could guide them to this discovery and help them to voice it.

Some children might discover that by pooling all the relevant objects in the group (e.g. all the maths books), they can successfully cover the table. (They could record the amount of books involved.) You can guide them to the realisation that using objects of a standard size (e.g. books of the same size) would be fairer in terms of the count. This will be covered in Senior Infants, so there is no need to dwell on this aspect.

# **Optional consolidation and extension possibilities**

**Story** Read *A Beach for Albert* by Eleanor May or listen to a reading at: edco.ie/cde5 Albert the mouse must choose the correct implement to fill a children's paddling pool with water.

**Role Play** The children could re-enact the story of *A Beach for Albert*, using small-world objects and the

sand area. What will they use to make a small paddling pool for Albert and his friends? It needs to be waterproof. What will they use to fill the paddling pool?

**Role Play** The children could role-play waiting staff preparing a table for a customer at a restaurant. Which object will work best to cover the table: napkins, a cushion cover, a large piece of fabric?

**Role Play** The children could role-play decorators, and try to figure out how much wallpaper they will need to redecorate the Play Area. Wallpaper/ wrapping paper, scissors and reusable adhesive tack will be needed. **Lily Pads** Using a toy frog or a frog made of plasticine or play dough, the children could work out what size lily pads they should make to help the frog hop across the 'pond' (an area of the table or floor). They could use plasticine or play dough to make lily pads in a range of sizes for their pond.

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

Use this menu of activity ideas to choose how best to structure this last lesson of the unit to suit your needs and the needs of your class.

Let's talk!	Let's create!
Read one of the suggested stories you may not have had time to try.	The children cut up magazine pages or coloured paper into small pieces and use these to make a mosaic or collage. Which pieces work best at covering a sheet of paper: torn pieces, coloured squares, 'squares' that they make by 'drawing around' a 2-D shape and cutting them out?
Maths language	Let's investigate!
Revisit some of the digital resources to ensure that the language of capacity and area is understood. Use the maths language cards for this unit to revise the key terms. For example: If the image and text are cut apart, can the children match them?	A group of children could investigate how to find the right size cot sheet for a doll's/teddy's 'cot'. A shoebox could be used for the cot, and the cot sheet could be cut from a fabric remnant. How will the children decide on the right size? Will they put the shoebox lid on top of the fabric and cut around it, or will they lay the fabric inside the shoebox lid and draw the outline with a marker/chalk?
Progress Assessment Booklet	Maths eyes
Complete Questions 48–51 on pages 23–24. Alternatively, these can be left to do as part of a bigger review during the next review week.	Try out some of the Maths Eyes suggestions in the Optional Consolidation and Extension Possibilities you might not have had a chance to do.
Let's strengthen	Let's deepen
A group of children could use the containers and various materials again, to gain additional support with the language of capacity, making comparisons, ordering containers, and understanding conservation of capacity. Use the Unit 11 Let's Strengthen PCM.	Tell the children that you want to write a shopping list with lots of items on it (bread, bananas, milk, yoghurt, pasta, ice cream, butter, apples, rice, etc.). Give them sticky notes of different sizes, and ask them to figure out which would be the best size to write your list on.



