Term: 3	**Weeks: 2**	**Year Level: 1**	**Learning Area: Mathematics - Geometry**	**Topic: Shape**
WEEK / LESSON	**OUTCOME FOCUS SPECIFIC LESSON OBJECTIVES**	ASSESSMENT (WHAT & HOW)	LEARNING EXPERIENCE including PROVISIONS FOR LEARNER DIVERSITY and KEY QUESTIONS	RESOURCES
Lesson 1	Describe shapes using everyday words such as 'corners' and 'sides'. Students will identify and count the sides of a shape. Students will identify corners on various shapes. Students will classify various shapes by name.	Through the use of an observational checklist I will be assessing if students are able to: 1. Identify shapes by name. 2. Identify the number of sides on a shape. 3. Identify the corners of a shape. The teacher assistant will be ticking if children were meeting those objectives whilst I am running the lesson.	My 2D shapes PowerPoint will be on the interactive whiteboard. The interactive activity allows students to recap on shapes they already know as well as to learn new shapes. We will emphasise on the words' corners' and 'sides' when discussing all shapes. *Who knows what a side is?* I will have a laminated rectangle in my hand and ask a student to come up and trace over the sides of the rectangle with a whiteboard marker. *Who can tell me what a corner is?* I will show students the corners on a rectangle picture frame, so they are able to identify them. Throughout the shapes PowerPoint I will be asking different students to come and point to the corners on the different shapes and say how many there are). As we go through the interactive PowerPoint activity students will have to identify the shapes, then they will be asked how many sides the shape has and we will count the sides and corners as a class. I will then write on the whiteboard under the shape, using modelled writing, "This is a _____, it has ____sides." For each shape I will use modelled writing to put together a sentence about the shape and how many corners and sides it has encouraging student ideas and participation. *Does this shape have any corners?* As we are going through each shape in the PowerPoint I will be asking different students if the shape has corners and to point to them. I will ask students if they think the sides of the shape are the same/equal. I will get a coloured piece of string that I have (already) cut to the length of one side of each shape. I will measure one side from tip to tip and ask different children to measure the other sides. - Ask students if all sides were the same.	Ensure the smart board is on and the PowerPoint is running to ensure no delays. 2D shapes PowerPoint (Attachment 1) A4 laminated triangle. Whiteboard marker. Photo frame. Assessment checklist. (Attachment 2) Fly squat. Pre cut coloured string for each shape that is the length of one side. Laminated shapes and laminated

Lesson 2	Investigate 2D shapes to determine suitability *(e.g. what shapes can be used to; draw a house, represent a flower?)* Students create a picture using 2D shapes.	Once students have written an explanation of their drawing and the shapes they used I will collect their shape pictures. I will tick off on a checklist what shapes they have used. (Attachment 3) This assessment will show me the shapes they are confident in using and know about, and the shapes that I can focus on more in future lessons.	The whiteboard will be separate in half with a line down the middle. On both sides will be laminated shapes and laminated numbers (that correspond to the amount of sides each shape has.) Students will be sitting on the matt. I will call up two students at a time, then for example ill say, "I am a triangle". Students will have to squat the triangle and the number 3 because a triangle has three sides. The student who was first to squat both correctly put together a sentence about the shape and its sides "I am an triangle and I have three sides." Students will have collage material and pencils. They will use scissors to cut shapes out of the collage material and pencils to draw the shapes. They need to create a picture of their choice, for example their house, a garden or a street, using four or more different shapes. Once all students have created their shapes picture, or the majority have finished, students will come and stand around the matt. I will ask one student what shape we will sit in, on the matt today. If the student says a square, I will ask students how many sides does a square have? "We need four sides in our square." Each student will have their shape picture on the floor in front of them, the first child will hold up their shape artwork and show the class, tell us what their picture is of and the shapes they have used in their work. *Key Questions to ask during lesson conclusion:* - *How many triangles do you have? (Or any shape on the child's art piece)* - *Why did you use that shape?* - *How many sides are there on your rectangle? Are all of the sides supposed to be the same?*	numbers stuck on the whiteboard. Collage material. Pencils. Scissors. Paper. Work sample Attachment 4

Lesson 3	Students work cooperatively with others to problem solve in creating shapes with their bodies. Students will demonstrate active listening skills. Students will work cooperatively in a group.	I will take running records on five children. This information will then be input into an observational grid.	On the whiteboard I will draw one shape at a time. Around the classroom will be visual aids of the shapes we are discussing today (hexagon, octagon, triangle, rectangle, square). The first shape will be drawn on the board and will be asked if they know what the shape is. If students are unaware I will write the shape name on the white board. As I am doing so I will sound out each sound in the word and blend it, modelling how to sound out words. I will ask students to sound out with me then together we will blend the word together. This shape is an octagon. *Who can show me the side on this octagon?* *Does anyone know how many sides the shape has?* We will count the sides as a class and once again I will ask students to put their hand up if they know how many sides the shape has. I will ask a different child to stand up and tell the class what the shape is and how many sides it has. We will do this for all of the shapes (square, rectangle, octagon, triangle, square) *Who knows the special name we have for these shapes?* - Two-dimensional. 2D shapes are flat shapes. *Who can name a 2D shape?* I will have four different laminated shapes (a square, rectangle, triangle and circle). Students will all be given a shape and will then have to find three other	Whiteboard marker. Paper for running records. CD player + CD

			people in the class with the same shape as them. They can not use the shape name to find other their partners they can only communicate by describing the shape names: - *Who has three sides?* - *Who has four corners?* Students will work in their teams of four to make shapes with their bodies. The music will play and they will move quickly around the matt area. When the music stops, students have to find their partners and make the shape that I call out, they can lie on the floor to make the shape or stand.	
Lesson 4	Students will identify 2D shapes. Students will describe the attributes of 2D shapes using words like 'corners', 'edges' and 'sides'.	I will be assessing the fishing for shapes activity. I will have a checklist in which I assess: - the shape/s the child caught. - Uses describe words to describe a shape -Able to identify the number of sides of a shape	Today's lesson will be done in three groups. Station one will be undertaken independently, station two will work with the teacher assistant and I will work with station three. Students will spend approximately 10 minutes at each group. Station One *Fishing for shapes* Laminated paper 2D shapes (triangle's, rectangles, pentagons, hexagons and octagons), which have paper clips attached to them, will be placed in the water bucket. Before I give students their fishing rods with magnets attached I will tell them about the activity. Students will use their fishing rods to, one at a time, fish for shapes. Once they catch a shape they will take it off the hook and hold it so everyone can see. They will have to name the object, describe it and say how many sides it has.	Laminated shapes with safety clips: - triangle - rectangle - pentagon - hexagon - octagon - cube Water bucket. Fishing rod with magnet on the end. Foam cube Triangle, rectangle, pentagon, hexagon, octagon and a cube. Black bag. Blindfold. Play dough.

Lesson 5	Objects in the environment can be represented with materials. Students describe shapes and examples of them within their school. Students will use a tally table to record data. Students demonstrate active listening when	- Able to identify a shape as 2D or 3D Attachment 6 I will be assessing student's abilities of data recording, as the majority of the lesson revolves around tallying. At the end of the lesson I will collect students tally worksheets to assess if they were able to successfully	A cube and a cylinder object in the water bucket to extend students and see if they are able to identify the 3D shapes. *What is the difference is between the 2D and 3D objects?* Station two A triangle, rectangle, pentagon, hexagon, octagon and a cube will be placed in a bag. The teacher assistant will put an eye mask on the first child, to ensure they cannot see. The child will put their hand in the bag and choose a shape. Students will: - Feel the shaped - Describe what it feels like - Discuss how many sides it has - Is it flat or 3D - Guess what they think the shape is. If the child is unable to guess the shape other students in the group who have been listening to the descriptions will have the opportunity to guess the shape. Station three Students will use play dough to create shapes. They will choose their favourite shape and discuss the features of it. They will use penicils to draw their favourite shape that they created on the worksheet, then write about what the shape is and how many edges it has. Students who are having difficulty with writing will be given a worksheet with prompts (as seen in the attachment 7) however students will write independently. I will take a photo of the students play dough shape to put in their portfolio with the illustration they did of the shape. I will tally of how many boys and how many girls are in the class today. Students will be using this tally concept on our school shape walk. The shape walk worksheet will be given to students and they will be told that they will tally, just like I did with attendance, the shapes they see in their surroundings. We will leave the classroom and walk around the school as a class looking for objects in our environment that look like shapes.	Camera. My favourite shape worksheet (example attachment 7) Shape walk tally worksheet (attachment 8) Camera Data assessment checklist (attachment 9)

Lesson 6	exploring the school. Objects in the environment can be represented with materials or by drawing. Demonstrates an ability to build a model using two-dimensional shapes and three- dimensional	record the shapes they saw on the shape walk and if they were able to add up to form totals. Portfolio piece. A photo will be taken of each group's block school. The photo will be at the top of the page and the	*What shape does the office door look like? What shapes we can see in gardens? What shape does the shed look like? What shape does our classroom roof look like?* We will come back and sit on the matt. I will ask each child to think of one shape they saw on our walk. Each child will come up to the board and draw the shape and what it was they saw (for example if a child says they saw a rectangle shape door they would draw a rectangle door). The table the students have on their worksheet will be drawn on the whiteboard. Whilst I am doing this, the teacher assistant would have given the children each a pencil and they would be adding up the amount of shapes they saw and writing the total for each shape at the bottom. One at a time each student will come up, and put a tally under the shape that they saw the most. As a class we will add up a total for each shape and I will ask students which shape do we gave the *most* of and which shape we have the *least* of.	Black bag. Wooden square construction block (for the motivation/intro) Construction blocks Camera

Lesson 7	objects. Represents their own school model with a drawing. Students will identify that 2D shapes can be found in 3D shapes.	child's illustration of the school at the bottom. Below the illustration will be a comment on the child's use of shapes, for example, "Jimmy demonstrates an excellent ability of using shapes to create his school setting, through the use of *various* 2D shapes." I will use a checklist to assess the key features of	A wooden square construction block will be in a black bag. Student will be sitting on the mat and instructed to listen as the bag is shaken. *- Is the mystery object making a noise?* One student will come up and put their hand in the bag. *- What does it feel like? Is it smooth? Is it rough?* The student standing will sit down and I will ask for another volunteer. *- What does it feel like?* *- Does it have any sides?* The student standing will sit down and I will ask for another volunteer. *- What does it feel like?* *- Is it heavy?* *- Do you think you know what is inside the mystery bag?* The object will be described to the whole class if volunteers are unable to guess the shape. Students will use the construction blocks, all of different shapes, to make our school. There will be pictures of the school on the whiteboard, from photos taken the day prior on our shape walk. A brainstorm will be constructed on the whiteboard about what we need to include: - Toilets, classrooms, the playground, canteen and oval. Each student will be given a coloured pop stick and need to find the other two students in the class with the same colour as them. This will be the group they work in to construct a model of the school using construction blocks. Students will be encouraged to use a variety of shapes. *The teacher assistant or I will take photos of each groups school construction.* Students will draw their shape school emphasising the shapes on their illustration.	A4 paper Photos of the school that were taken on yesterdays shape walk. Pencils A4 paper. 3D powerpoint. (Attachement 11)

Lesson 8	Students will discover key features of cubes and cylinders *objects.* Students will use describing words to describe a cube and cylinder.	a cube or cylinder that students can identify, such as corners or sides. Attachment 10	The 3d PowerPoint will be used as a visual aid to consolidate the hands on aspect of this lesson. The PowerPoint allows students to further discover where the sides, faces and corers are on a cube and cylinder. *CUBE* Students will be sitting in a circle on the matt and I will pass around the 3D foam cube for students to feel and get a closer look of. - *Who knows what this shape is called?* - *Who thinks this is a 2D object?* - *Is it a flat object? If it isn't a flat object, then it isn't 2D, who knows what it is called?* - *How many sides does this cube have?* As a class we will count the sides. - *Does anyone know what a face looks like on the cube? Students can come up and show the class.* - *Put your hand up if you think you know where the corners are on this cube?* - Students will count the sides, faces and corners of the foam cube first, then we will consolidate the information through he use of the PowerPoint, where students will be selected to write information about the cube (as seen in attachment 11) Cylinder I will past the cylinder shape mail tube around the circle. Students will fell and look at it. - *Who knows the special shape name for this object?* - *How many faces does this cylinder have?* As we are going through the interactive whiteboard I will demonstrate modelled writing in describing each shape. Students will be encouraged to provide describing words for reach shape as I write sentences on the board.	Foam dice (cube) Assessment checklist (attachment 10) Cylinder mail tube.

Lesson 9	Recognise and classify familiar 2D and 3D shapes using obvious features. Student are able to describe the features of 2D and some 3D shapes	I will take a photo of student's individual classifying activity. I will use the attached rubric to assess students on if they are: - Able to sort *all* 2D and 3D shapes into the appropriate columns. -Able to sort *some* 2D and 3D shapes into the appropriate column. - Unable to sort 2D and 3D shapes into the appropriate column. Attachment 12	*Are 3D shapes flat shapes?* *What are some flat shapes?* *What is the special name we have for flat shapes?* The cube will be held up so one face is facing students. - *Can anyone see a 2D shape?* - *How many sides does it have?* A cube is 3D because it is not a flat shape. 2D shapes can be found in 3D shapes. Students will be sitting on the matt facing the interactive whiteboard. *- Who can tell me, or point to a 2D object in our classroom?* *- Is a 2D object a flat object?* *- Can anyone see a 3D object in the classroom?* As a class we will complete the interactive whiteboard 2D and 3D classification activity where each student will have the opportunity to come to the whiteboard, select a shape and put it in either the 2D column or the 3D column. The previous day I would have asked students to bring in an object from home that resembles either a 2D or 3D shape, for example a dice (3D cube) or a Frisbee (2D circle) Students will sit in a circle on the mat. I will put a strip of masking tape down the middle of the circle. One side will have a laminated card that says '2D' and the other side will say '3D'. I will bring the box that students put their objects into this morning into the middle of the matt. An object will be held up, one at a time, and the child whom it belongs to will stand up and come to the middle of the circle. They will tell us what the item is, what the shape is that it resembles. The student will tell the class if it is a two dimensional or three-dimensional object and put it in the appropriate spot.	2D and 3D classification interactive whiteboard activity (Attachment 13) Shape object from home. Camera to take a photo of the class 2D and 3D classification. Masking tape. 2D and 3D laminated title cards with velcore on the back so they are able to stick to the carpet.

Lesson 10	Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features. Students identify and group shapes. Students utilize the knowledge of shape features to *identify* and *draw* a shape. Students are able to use language to describe shapes and attributes of shapes. Students are able to	Students 'Who am I' worksheet will be collected. I will be assessing student's knowledge of the features of 2D shapes and will record this on the child's Who am I sheet when marking. I will use a rubric to assess student's ability to utilize shape features to *draw and describe*	We will look around the classroom to see if there are any more objects that resemble shapes. If so we will bring them into onto the matt and classify them. *How are the 2D shapes and 3D shapes, that are in front of us, different?* - Encourage student to use words such as flat, curved, edges, and faces, when describing the differences between 2D and 3D shapes. Students will go back to their desks and use connectors to make 2D shapes and geo shapes to make a cube. They will then create a 2D title and 3D title and classify them under the relevant title. I will take a photo of each child's shape classification to assess if the were able to achieve the objective of creating and classifying 2D and 3D objects. The book 3 Little Fire fighters will be read to students. Throughout the book students will be asked to spot the 2D shapes. What are the names of the shapes and how many sides do they have? Can anyone see any 3d shapes? Students will be asked to group shapes: -*How many red shapes are there on the dog's jacket? How many orange rectangles are there? How many small squares can you see on the fireman's jacket? What is the shape on the carpet?* Shape heads. Shapes from the book will be used in the activity *Shape heads.* One student will sit on the chair next to the whiteboard and I will stick a shape to the whiteboard, above the child's head. The student with the shape above their head will ask yes / no questions to their peers about the shape, for example: - *Do I have four sides?* - *Are all of my sides the same?* - *Am I a 2D shape?* - *Does my name start with the letter S?*	Connectors Camera A4 paper Pencils 3 Little Fire fighters by Stuart J. Murphy Who am I worksheet? (Attachment 14) Wanted poster template. (Attachment 16)

	recognise the features of 2D shapes and represent them through drawing.	*a shape.* Attachment 15	All students will have a turn then go back to their desks and complete the *Who am I activity* (worksheet attachment 14). For this activity students are detectives, they are given clues and have to solve the mystery of what the shape is. Using the template provided, students will create a wanted poster for a missing shape. They will draw a shape of their choice and write a description about it, including the features of the shape. As a class, we will brainstorm what information students will need to put on their wanted posters: - How many sides the shape has. - Are the sides are the same? - Is it a 2D shape - Does it have curvy or straight edges - When it went missing. - Who to contact if it is found. - What the reward is if there is one.	Whiteboard marker for brainstorm.