

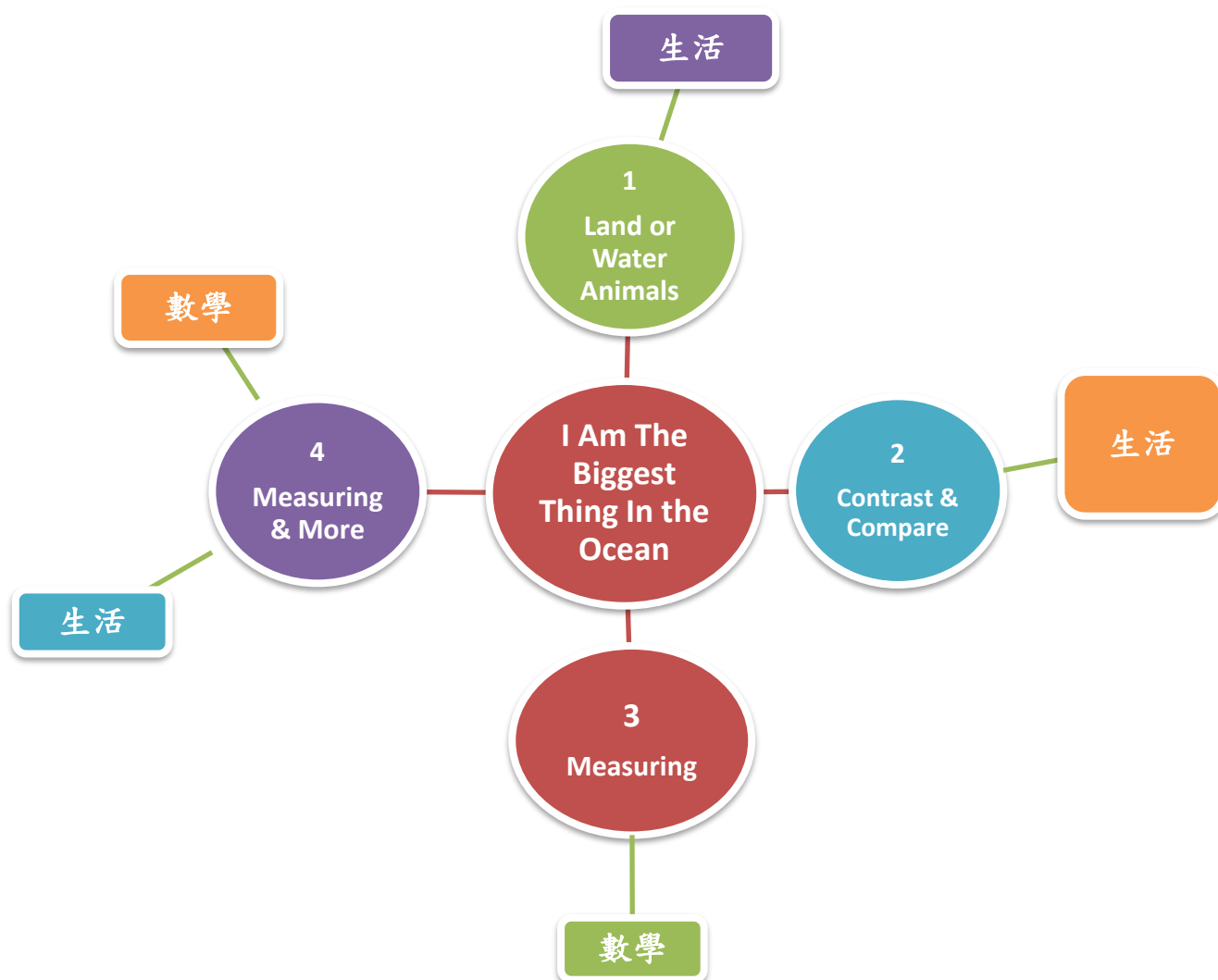
## 臺南市東區勝利國小一年級校訂彈性學習課程模組教案設計

主題名稱	海裡我最大 I Am the Biggest Thing In the Ocean	設計者	黃郁雯、王憶文、梁玉鈴
實施年級	一年級	總節數	4 節

### 教學設計理念說明：

對於小一的學生而言，大跟小的比較到底是如何對照？地球上，陸地上的動物比較大還是海裡的動物比較大呢？烏賊比較大還是章魚比較大呢？誰才是海裡最大的生物呢？本課程藉由各式各樣大大小小的海洋生物對比引發學習興趣及動機，帶領孩子進行海陸兩大類生物分類，並學習如何使用工具量測並描述日常生活中常見的物品尺寸大小長短高矮及排序，建立比較的”相對”概念。

### 跨領域主題統整架構圖：



核心素養、學習重點（含學習表現與學習內容）、學習目標對應情形		
核心素養	總綱	<p>A2</p> <p>具備問題理解、思辨分析、推理批判的系統思考與後設思考素養，並能行動與反思，以有效處理及解決生活、生命問題。</p>
	領綱 (不含英語)	<p><b>數-E-B1</b> 具備日常語言與數字及算術符號之間的轉換能力，並能熟練操作日常使用之度量衡及時間，認識日常經驗中的幾何形體，並能以符號表示公式。</p> <p><b>數-E-A2</b> 能執行基本的算術操作，能指認基本的形體與相對關係，並在日常生活的情境中，用數學表述與解決問題。</p> <p><b>生活-E-A1</b> 透過自己與外界的連結，產生自我感知並能對自己有正向的看法，進而愛惜自己，同時透過對生活事物的探索與探究，體會與感受學習的樂趣，並能主動發現問題及解決問題，持續學習。</p> <p><b>生活-E-A2</b> 學習各種探究人、事、物的方法並理解探究後所獲得的道理，增進系統思考與解決問題的能力。</p> <p><b>生活-E-B1</b> 使用適切且多元的表徵符號，表達自己的想法、與人溝通，並能同理與尊重他人想法。</p>
學習重點	學習表現	<p>生活</p> <p>3-I-1 願意參與各種學習活動，表現好奇與求知探究之心。</p> <p>3-I-3 體會學習的樂趣和成就感，主動學習新的事物。</p> <p>7-I-5 透過一起工作的過程，感受合作的重要性。</p>
	學習內容	<p>生活</p> <p>D-I-4 共同工作並相互協助。</p> <p>數學</p> <p>C-I-2 媒材特性與符號表徵的使用。</p> <p>N-1-1 一百以內的數：含操作活動。用數表示多少與順序。</p>
學習目標		藉由辨識海陸生物形體及特性、理解大小長短高矮的比較與對照、使用非公制單位工具進行量測，並應用於實際生活生活周遭可見人事物，進行邏輯判斷。
議題融入 (實質內涵)		<p>海洋教育- 海洋文化</p> <p>海 E7 閱讀、分享及創作與海洋有關的故事</p>
教材來源		<p>1. 繪本：I Am the Biggest Thing In the Ocean By Kevin Sherry</p> <p>2. 康軒版 一年級生活課本</p> <p>3. 自編教材</p>
教學資源/ 設備需求		<p>1. Overhead Projector</p> <p>2. 小白板、白板筆、板擦</p> <p>3. 動物圖卡(護貝)</p> <p>4. 迴紋針</p>

	<p>5. 白色古氏積木 1*1*1*1</p> <p>6 教室內常見物品：橡皮擦、鉛筆、筆記本…等數種。</p> <p>7 拍攝學生照數張。</p>
參考資料	<p><a href="https://www.youtube.com/watch?v=7pMEQsk3c5Y">https://www.youtube.com/watch?v=7pMEQsk3c5Y</a></p> <p><a href="https://www.google.com/search?">https://www.google.com/search?</a></p> <p><a href="https://www.youtube.com/watch?v=P7-UNYm0P2w">https://www.youtube.com/watch?v=P7-UNYm0P2w</a></p> <p><a href="https://www.youtube.com/watch?v=a1kN6QxpI6E">https://www.youtube.com/watch?v=a1kN6QxpI6E</a></p> <p><a href="https://www.education.com/lesson-plans/?cid=11.2143">https://www.education.com/lesson-plans/?cid=11.2143</a></p> <p><a href="https://www.projectpals.com/project-based-learning-blog/how-to-implement-inquiry-based-learning-lesson-plans">https://www.projectpals.com/project-based-learning-blog/how-to-implement-inquiry-based-learning-lesson-plans</a></p> <p><a href="https://ncssm.instructure.com/courses/789/modules">https://ncssm.instructure.com/courses/789/modules</a></p> <p><a href="https://www.youtube.com/watch?v=P7-UNYm0P2w&amp;t=50s">https://www.youtube.com/watch?v=P7-UNYm0P2w&amp;t=50s</a></p>

英語鷹架 (Scaffolding language) :

Lesson 1

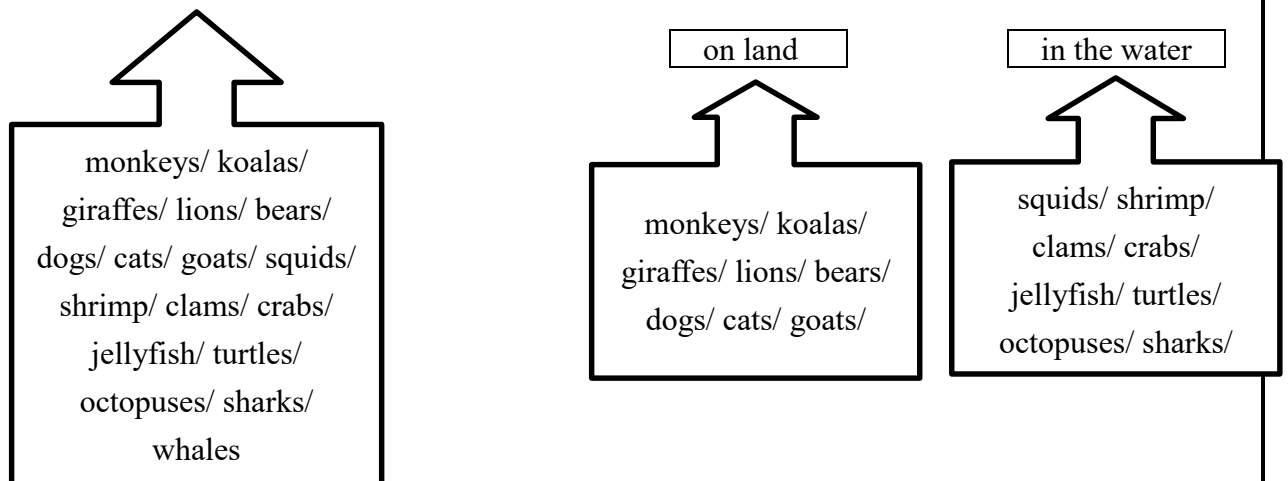
透過提問 (Question)

1. Is it land or water?
2. Where do \_\_\_\_\_ live?

water.

建立概念 (Concept building)

1. Water. / Land.
2. ( \_\_\_\_\_ ) live on land / in the



產出 (Production)

They are lions. Lions live on land.

They are shrimps. Shrimps live in the water.

Plus 1+

big/small/long/short

Lions are big.

Shrimps are small.

## Lesson 2

### 透過比較與對照 (Contrast & Compare)



### 強化概念 (Reinforce Concept)

#### Contrasting

1. Which are the odd ones?

(Lions, goats or fish?)

2. Why?

1. (Fish).

2. Because (lions live on land, but fish live in the water.)

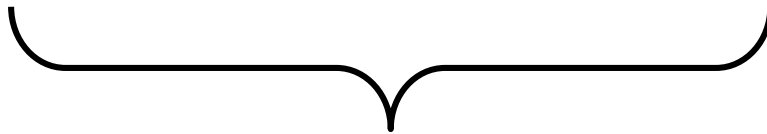
#### Comparing

3. Draw something bigger than the TV.

4. Tell me something smaller than the marker.

3. (windows, doors, posters, ...)

4. The eraser....



#### 產出 (Production)

This TV is big.

This window is bigger (than the TV).

The door is bigger (than this window).

The door is the biggest.

(+1 knowledge extended)



\*Whales are mammals.

\*Lions and tigers are in the cat family.

\*Koalas and kangaroos have pouches

### Lesson 3

#### 藉由比較與量測 (Compare & Measuring)

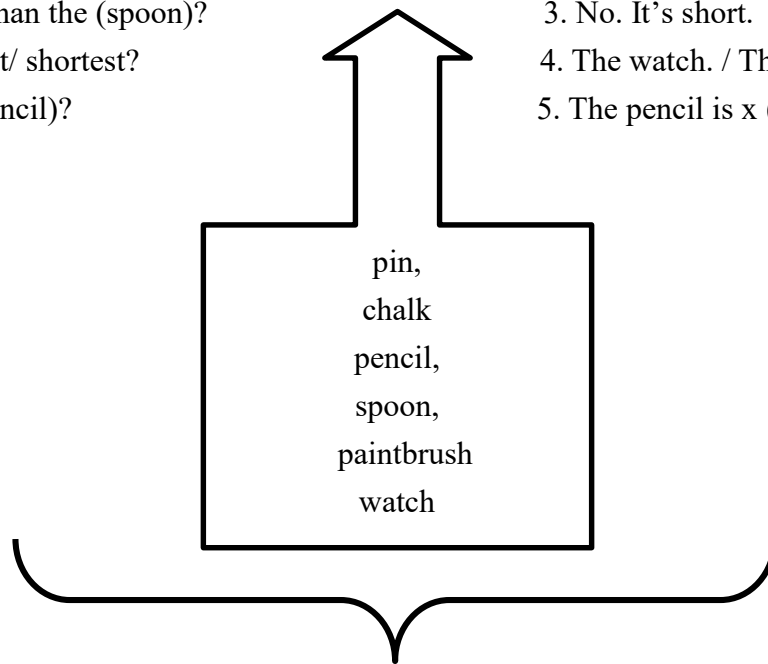


#### 應用測量 (Application)

Using stationaries (things in the classroom) to compare sizes

1. Which is shorter? The (**pencil**) or the (**paintbrush**)?
2. Which is longer than the (chalk)?
3. Is the (pin) longer than the (spoon)?
4. Which is the longest/ shortest?
5. How long is the (pencil)?

1. The paintbrush.
2. The spoon/ paintbrush / watch / Pencil.
3. No. It's short.
4. The watch. / The pin.
5. The pencil is x (clips) long.



#### 產出 (Production)

The spoon is 7 clips long.

The pin is 2 clips long.

The watch is 9 clips long.

The spoon is longer than the spoon.

The pin is shorter than the (chalk/ pencil/spoon/paintbrush/watch).

The watch is the longest.

The pin is the shortest.

## Lesson 4

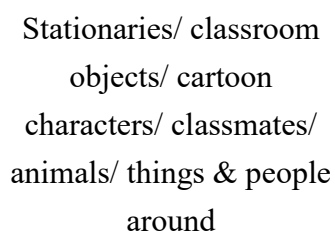
### Reinforce

### 歸納事實 (Conclude the facts)

(Using classroom/daily objects and cartoon characters (or classmates) to practice comparing.)

T: Please tell me something bigger than **the TV**.

—S: (The window) is bigger than the TV.



Stationaries/ classroom  
objects/ cartoon  
characters/ classmates/  
animals/ things & people  
around

1. A is shorter/ longer / taller / bigger / smaller than B.
2. B is shorter/ longer / taller / bigger / smaller than C.
3. C is shorter/ longer / taller / bigger / smaller the tallest.
4. Who/What /Which is the shorter/ longer / taller / bigger / smaller?

### 產出 (Production)

(Plus 1 )

I know (The blackboard) is the biggest thing in the classroom.  
Because it is bigger than the (door/window/table) and (other things).

My pencil case is (12 clips) long.

My pencil case is (16 coins) long.

\*Because a (coin) is shorter than a (paper clip).

教學活動內容	Teacher's words	Students' words
<p><b>【第一節/單元名稱：Land or Water Animals】</b></p> <p><b>Pre-task : World Map</b></p> <ol style="list-style-type: none"> <li>1. Show students a world map, and guide them to identify where lands and waters are?</li> <li>2. Introduce the differences between land and water by showing the photos of the animals.</li> </ol> <p><b>Main task: Look and Tell</b></p> <p>A. Land Animals vs. Sea Animals</p> <ol style="list-style-type: none"> <li>1. Show pictures of land and ocean animals with mosaic.</li> <li>2. Students then guess what the land and water animals they are.</li> </ol> <p>※Animals listed as following: Monkey, koala, giraffe, lion, bear, dog, cat, goat, squid, shrimp, clam, crab, jellyfish, turtle, octopus, shark, whale.</p> <p>B. Where do they live?</p> <ol style="list-style-type: none"> <li>1. Present the ppt.</li> <li>2. Show 8 different kinds of animals, and confirm students' awareness of where the animals live.</li> </ol> <p><b>Post task: Show and tell.</b></p> <ol style="list-style-type: none"> <li>1. Given each student one sea or land animal picture cards.</li> <li>2. Students have oral presentation on stage one after one.</li> <li>3. Other students learn to listen and pay attention to others' presentation courteously.</li> <li>3. Review all the animals by guessing what the animals are.</li> </ol>	<p>T: Is it land? Is it water?</p> <p>T: It lives on land. What is it? It lives in water. What is it?</p> <p>T : <i>Where do monkeys live?</i></p> <p>T: What are they? Where do they live?</p>	<p>S: It is land. It is water</p> <p>S: It is a/an _____. (monkey, koala, giraffe, lion, bear, dog, cat, goat, squid, shrimp, clam, crab, jellyfish, turtle, octopus, shark, whale.)</p> <p>S: <i>They live on land.</i> (whales, lions, giraffes, koalas, sharks)</p> <p>S: They are _____. They live in the water/ on land.</p>
<p><b>評量方式 (評量內容與策略)</b></p>	<ol style="list-style-type: none"> <li>1. 透過口語發表，檢視學生對動物名與他們居住在路地或海洋概念的理解。</li> <li>2. 利用教室觀察，確認學生是否達到學習目標。</li> <li>3. 觀察學生是否能夠合作完成口語發表任務。</li> <li>4. 觀察學生是否能尊重，並且聆聽其他學生的發表。</li> </ol> <p>精熟：回答完全正確，並能用完整句子回答。</p> <p>優良：80%以上回答正確，回答內容與題目相符，但文法略有錯誤。</p> <p>通過：60% 以上回答正確，回答內容與題目相符，但文法略有錯誤。。</p> <p>待加強：60% 以下回答正確，且須老師提示或引導才能回答問題。</p>	



教學活動內容	Teacher's words	Students' words
<p><b>【第二節/單元名稱：Contrast &amp; Compare】</b></p> <p><b>Pre-task : Contrast</b></p> <p><b>Odd One Out!</b></p> <ol style="list-style-type: none"> <li>1. Greet and explain t of “ Same and different “.</li> <li>2. Assign each student a number in every team.</li> <li>3. Do the activity: Odd One Out.</li> <li>4. Assign each team a mini whiteboard on the blackboard.</li> <li>5. Present them the PPT slide and ask Ss. to write down the picture number of the odd animals.</li> <li>6. Show the first one as an example:             <p><b>1. zebras / 2. cats / 3. stingrays</b></p> <div style="margin-left: 20px;"> <p>{ Q1- 1. whale / 2. seahorse / 3. shark</p> <p>  A1- 1 whale. (It's a mammal)</p> <p>{ Q2- 1. turtle / 2. squid / 3. Octopus</p> <p>  A2- 1 turtle. (It doesn't have tentacles)</p> </div> </li> </ol> <p><b>Main task : Compare</b></p> <p><b>~I Am the Biggest Thing in the Ocean</b></p> <ol style="list-style-type: none"> <li>1. Show students the slides with all sea animals and ask:             <p>※ dolphin, diver, starfish, stingray, eel, sea horse...</p> </li> <li>2. Read out loud with “facial and sound” expressions.</li> <li>3. Go through “ I am the biggest thing in the ocean together.” (Story time by Steph)  <a href="https://www.youtube.com/watch?v=a1kN6QxpI6E">https://www.youtube.com/watch?v=a1kN6QxpI6E</a> </li> <li>4. Ask questions about the story.</li> </ol> <p><b>Post task:</b></p> <p><b>Song: Down in the blue sea</b>  <a href="https://www.youtube.com/watch?v=P7-UNYm0P2w">https://www.youtube.com/watch?v=P7-UNYm0P2w</a> </p> <ol style="list-style-type: none"> <li>1. Review the sea animals.</li> <li>2. Sing the song and do sea animal dance together.</li> </ol>	<p>T: Are they the same? Are they different?</p> <p>T: Write down the picture number of the “odd” one.</p> <p>T: Let's look at the example. Which one is the odd one?</p> <p>T: Can you tell me why?</p> <p>T: Now, we are going down into the ocean and find out “Who is the Biggest thing in the ocean.”</p> <p>T: Can anyone tell me who the biggest thing in the ocean is~?</p> <p>T: What sea animals do you see? ....</p> <p>T: Alright,</p>	<p>Ss: Yes!</p> <p>Ss: Yes. / No.</p> <p>Ss: Okay!</p> <p>Ss: Picture No.3.</p> <p>Ss:(Because) (Cats and zebras are land animals ; stingrays are water (sea) animals.</p> <p>S.s: (any possible answers.)</p> <p>S.s: (dolphin, diver, starfish, stingray, eel, sea horse...etc.)</p>



3-2 Teacher gives each group a box of clips and asks S.s to take out a pencil. S.s use clips to measure their pencils.

3-3 Teacher asks questions and encourage S.s to tell the others how long their pencils are.

### Post ask: Measuring 非標準單位的量測

#### 1. Worksheet~ measuring practice.

1-1 Teacher directs S.s how to complete this worksheet.  
S.s work individually.

1-2 Check the measurement of 1-6 objects.


#### 2. Show and Tell.

2-1. Teacher, then, invite S. to share what they down on the worksheet and the measurement of it.


2-2 Teacher collects the worksheets and end the class.

Measure the objects with paper clips.

1) The paintbrush is \_\_\_\_ clips long.


☐ paper clips
 


2) The watch is \_\_\_\_ clips long.


☐ paper clips
 


3) The pin is \_\_\_\_ clips long.


☐ paper clips
 


4) The spoon is \_\_\_\_ clips long.


☐ paper clips
 

5) The pencil is \_\_\_\_ clips long.


☐ paper clips
 

6) The chalk is \_\_\_\_ clips long.


☐ paper clips
 

Now you try. (Draw and Measure)

7)  ☐ paper clips

how many clips long is my marker, Okay? Now let's see, (can we count together?) One, two, three! My marker is 3 clips long.

T: How long is your pencil?

T: Wow! So, whose pencil is the longest /shortest?

T: Now kids. We have to measure No.1 to 6 items on the worksheet. And you have to draw one thing in the space at the bottom. Draw whatever you can measure with paper clips.

T: What do you draw, (Kelly) ?

T: Cool. A pretty belt. How long is it?

T: Wow! This belt is X clips long.

Ss: My pencil is (X) clips long.  
(Possible answers~ My pencil is the longest. I have the longest pencil. Amy's pencil is the longest... )

S.: (A belt)

S: (It's) X (clips long).

<p><b>評量方式 (評量內容 與策略)</b></p>	<ol style="list-style-type: none"> <li>1. 透過歌曲問答，檢視學生對所學海陸生物及尺寸大小的理解</li> <li>2. 透過圖片影像，確認學生對大小概念的理解</li> <li>3. 利用教室觀察，確認學生是否達到學習目標</li> <li>4. 觀察學生是否能夠獨立完成書寫學習單 <ul style="list-style-type: none"> <li>Excellent: 學生能獨立完成學習單且全部正確。(包含名字和座號)</li> <li>Well Done: 學生能獨立且正確完成 80% 以上學習單的內容</li> <li>Okay: 學生能獨立且正確完成 60% 以上學習單的內容</li> <li>Need Improvement: 未達以上行為</li> </ul> </li> </ol>
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<p><b>【第四節/單元名稱: Measuring and More】</b></p> <p><b>Pre-task:</b></p> <ol style="list-style-type: none"> <li>1. Greet and explain that now students will get even more practice comparing objects!</li> <li>2. Present PPT slides of different animation characters, animals and daily items. Examples: Doraemon / Takeshi/ Suneo (tall/ short) A giraffe/ a horse / a cow (tall / short) A chick / a rooster / a turkey (big / small) A clownfish/ a lobster/ a sea turtle (big/ small) A train/ a bus / a bicycle/a jet plane (long/ short) Ironman/ Olaf / Pokemon / Godzilla (tall/ short)</li> </ol> <p><b>Main task~ Treasure Hunt!</b></p> <ol style="list-style-type: none"> <li>1. Ask size questions about objects in the classroom. Provide additional items for students to compare.</li> <li>2. Pass out the worksheet. “The Big and Small / Long and Short Treasure Hunt”. Put 4 students in a group. Assign each student a mission.</li> <li>3. Have students complete the worksheet. Then, place group worksheet on the board. Invite students to the front to share their group work and compare their works.</li> </ol>	<p>T: So we’ve learned how to measure things with paper clips. Now we’re going to compare more things and people. Look what we have here. Ha! We’ve got “Takeshi , Suneo and Doraemon”, so who is the tallest? Who is the shortest?</p> <p>T: Kids, look around the classroom. Please find me something bigger than my pen</p> <p>T: Are the pen and the pencil the same long?</p> <p>T: Ok. Now you are going to tell me the biggest/longest/shortest/smallest thing in the classroom. There are 4 of you in a group.</p>	<p>S.s: (Doraemon) is the shortest. Takeshi is the tallest.</p> <p>S.s: (Any possible answers )</p> <p>S.s: No, the pencil is longer.</p>
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<p>4. Encourage students to practice using the vocabulary in context. For example, " _____ is the biggest thing in the classroom because it is bigger than _____.</p> <p><b>Post task: Using different units to measure</b></p> <ol style="list-style-type: none"> <li>1. Display a piece of ribbon or rope on the board.</li> <li>2. Encourage S.s to “guess” (estimate) how many paper clips/ cubes long the ribbon is.</li> <li>3. Use paper clips and unifix cubes to measure the rope.</li> <li>4. Explain why the measurements are different.</li> <li>5. Pass out the worksheet and have students complete.</li> <li>6. Then, encourage S.s to share what they draw and their measurements.</li> </ol>	<p>Number 1 of the group draw me the biggest thing in the classroom.</p> <p>Number 2....</p> <p>T: Kids!</p> <p>Look at the ribbon.</p> <p>Now, can anyone tell me how many clips long is this ribbon?</p> <p>Let's use paper clips/ cubes to measure this ribbon.</p> <p>So the ribbon is 8 clips long. The ribbon is 10 cubes long. Why?</p>	<p>S.s:</p> <p>( ) is the biggest thing in the classroom because it is bigger than ( ).</p> <p>S.s: (Possible answers)</p> <p>S.s: (Possible answers)</p>
<p><b>評量方式 (評量內容與策略)</b></p>	<ol style="list-style-type: none"> <li>1. 透過照片 ppt 詢問相關問題，確認學生能以不同面向比較物件。</li> <li>2. 透過學生給予的答案，審視學生的理解。</li> <li>3. 利用隨堂觀察，確認學生是否達到學習目標。</li> <li>4. 觀察學生是否能夠獨立完成書寫學習單: <ul style="list-style-type: none"> <li>Excellent: 學生能獨立完成學習單且全部正確。(包含名字和座號)</li> <li>Well Done: 學生能獨立且正確完成 80% 以上學習單的內容</li> <li>Okay: 學生能獨立且正確完成 60% 以上學習單的內容</li> <li>Need Improvement: 未達以上行為</li> </ul> </li> </ol>	