



A+4

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer (如何知道星星的位置?)

1. What information do we need to describe the position of a star in the sky?
azimuth and height angle.
2. What should we prepare for stargazing at night? (我們必須準備什麼東西去看星星?)
紅色玻璃紙、手機、行動電源、外套、防蚊液
3. In memory, where do you see the most stars? (從小到大記憶中, 哪裡星星最多?)
墾丁。

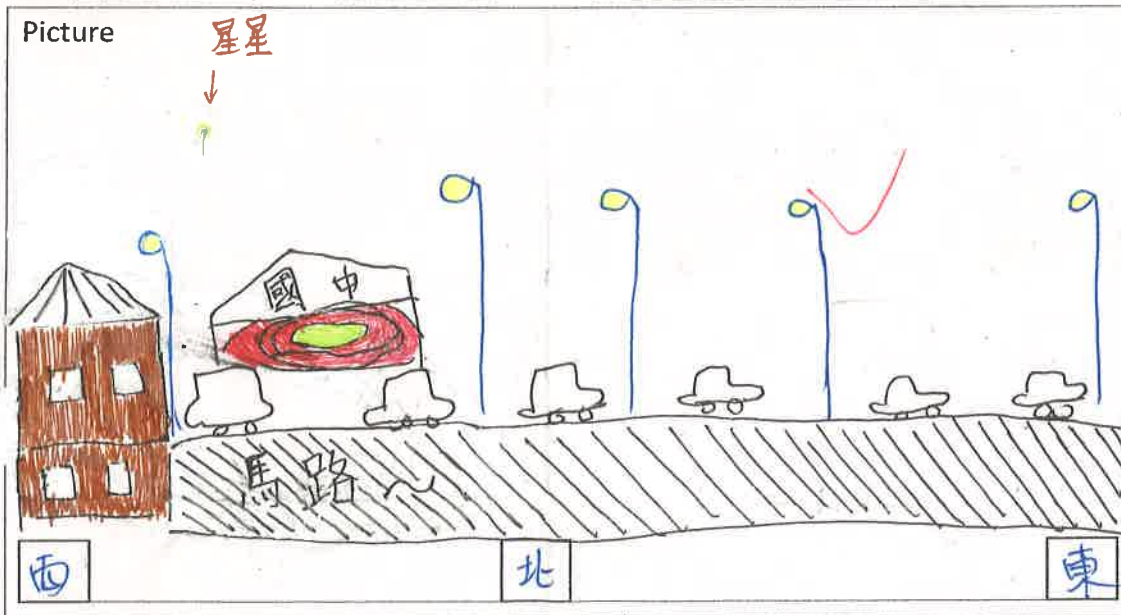
Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. Astrological Display: Data that know the direction of the stars.
2. compass: Know the tools of North, East, South.
3. star: A twinkling light in the sky at night.
4. flashlight: Handheld light-emitting tool.
5. azimuth: Tools used to find the stars in the sky.
6. height angle: Data that know the height of the stars.

Content: night stargazing record

Date: 3/22 Time: 7:02 Place: 我家頂樓



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]
2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

A++

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?

高度角、方位角

2. What should we prepare for stargazing at night?

指北針、玻璃紙(紅)、手電筒、星座盤、外套、Iphone、錶、行充

3. In memory, where do you see the most stars?

阿里山、陽明山、墾丁、貓空

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth : Data that know the direction of the stars.

2. compass : Know the tools of North, East, South.

3. star : A twinkling light in the sky at night.

4. flashlight : Handheld light-emitting tool.

5. Astrological Display : Tools used to find the stars in the sky.

6. height angle : Data that know the height of the stars.

Content: night stargazing record

Date: 3/22 Time: 8:00 Place: 賴家頂樓



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

A14

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer 賀

1. What information do we need to describe the position of a star in the sky?

方位角、高度角

2. What should we prepare for stargazing at night?

外套、指北針、抹布、紅色玻璃紙、防蚊液

3. In memory, where do you see the most stars?

美國

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth : Data that know the direction of the stars.

2. compass : Know the tools of North, East, South.

3. star : A twinkling light in the sky at night.

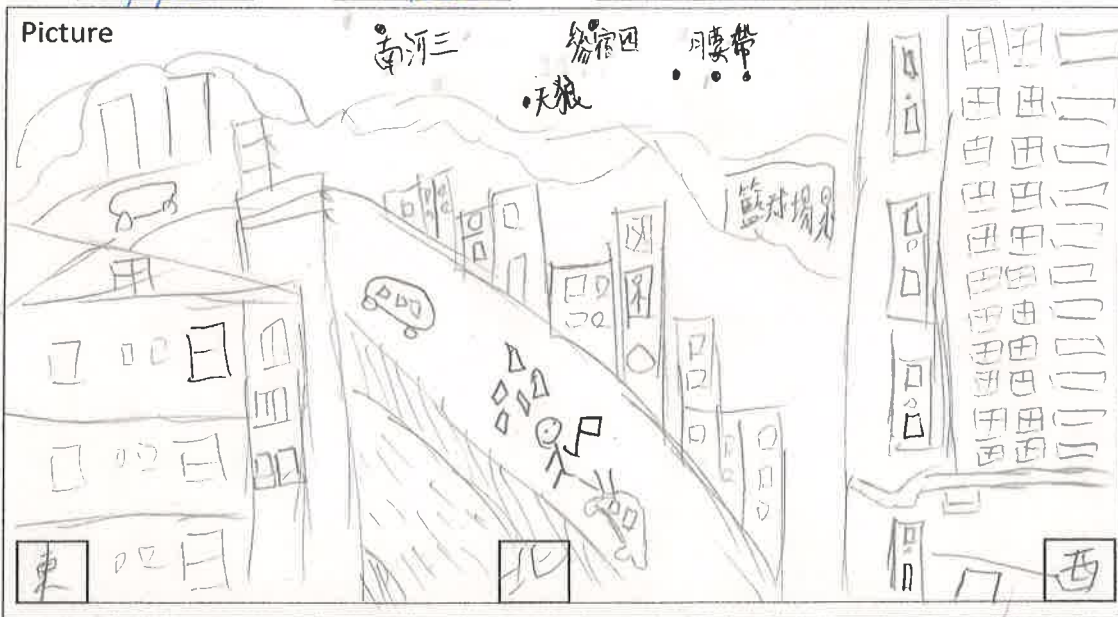
4. flashlight : Handheld light-emitting tool.

5. Astrological Displays : Tools used to find the stars in the sky.

6. height angle : Data that know the height of the stars.

Content: night stargazing record 九點半

Date: 11/1/13 Time: 九點半 Place: 頂樓



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information ^{資訊} do we need to describe the position ^{位置} of a star in the sky?

azimuth - height angle.

2. What should we prepare ^{準備} for stargazing ^{望星} at night?

compass, flashlight, coat, Astrological Displays, red glass paper, watch.

3. In memory ^{記憶}, where do you see the most stars?

北極

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth ✓ Data that know the direction of the stars.

2. compass ✓ : Know the tools of North, East, South.

3. star ✓ : A twinkling light in the sky at night.

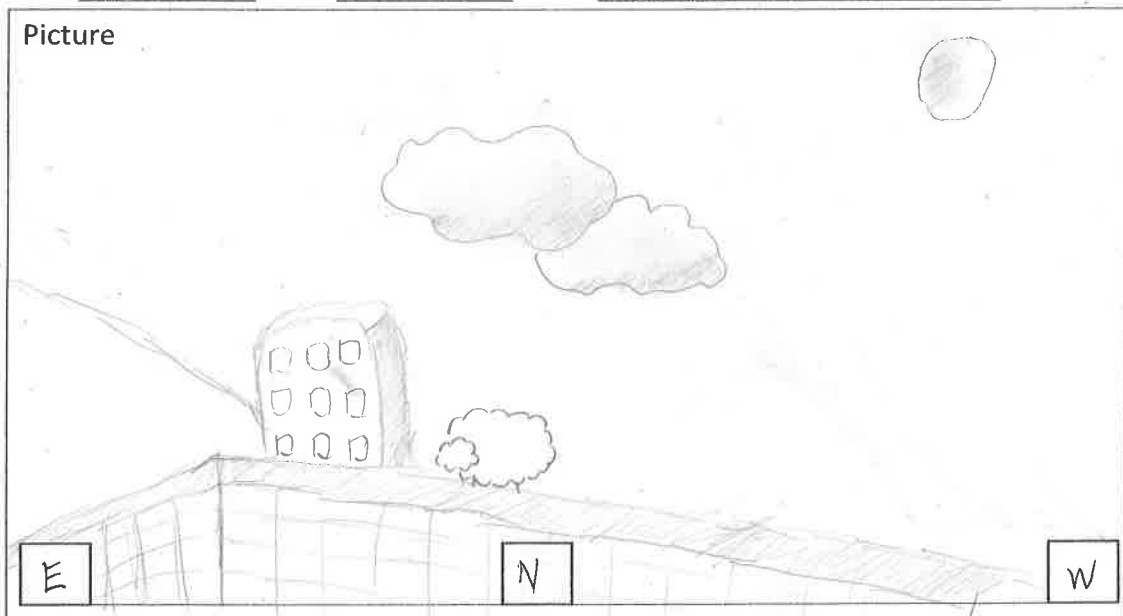
4. flashlight ✓ : Handheld light-emitting tool.

5. Astrological Displays ✓ : Tools used to find the stars in the sky.

6. height angle ✓ : Data that know the height of the stars.

Content: night stargazing record

Date: 3/10 Time: 9:36 Place: 我家頂樓



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?

A: 方位角 跟 高度角

2. What should we prepare for stargazing at night?

A: 手電筒、紅色玻璃、手機、指北針、手錶、星座盤、外套

3. In memory, where do you see the most stars?

A: 大 實 小

Concept

star (恆星) ③	Astrological Displays (星座盤)	height angle (高度角) ⑥
azimuth (方位角) ⑤	compass (指北針) ②	flashlight (手電筒) ④

1. azimuth : Data that know the direction of the stars.

2. compass : Know the tools of North, East, South.

3. star : A twinkling light in the sky at night.

4. flashlight : Handheld light-emitting tool.

5. Astrological Displays : Tools used to find the stars in the sky.

6. height angle : Data that know the height of the stars.

Content: night stargazing record

Date: 3/19 Time: 6:00 Place: 我家窗外



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

A+

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?

方位角或高度角

2. What should we prepare for stargazing at night?

手電筒、外套、星座盤、手錶、指北針、紅色玻璃紙、吃的、喝的、玩的

3. In memory, where do you see the most stars?

高雄左營區萬華酒店

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth ✓ Data that know the direction of the stars.

2. compass ✓ Know the tools of North, East, South.

3. star ✓ A twinkling light in the sky at night.

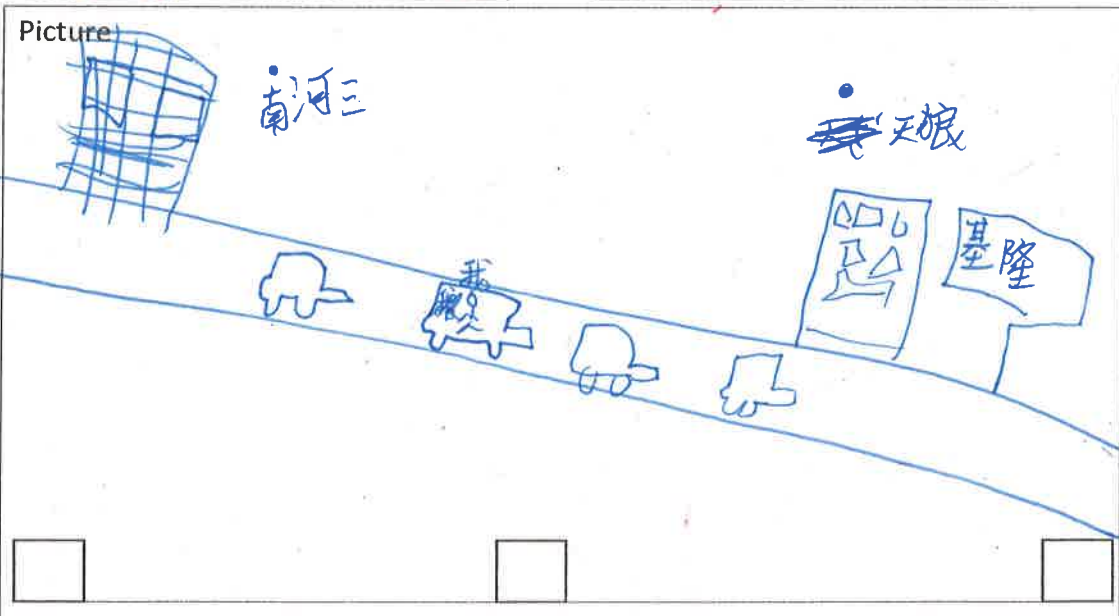
4. compass ✓ Handheld light-emitting tool.

5. azimuth ✓ Tools used to find the stars in the sky.

6. Astrological Displays ✓ Data that know the height of the stars.

Content: night stargazing record

Date: 11/3/18 Time: 7:00 Place:



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

Art

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?

高度角、方位角

2. What should we prepare for stargazing at night?

~~非紅色玻璃紙~~ 紅色玻璃紙、外套、手錶、行充

3. In memory, where do you see the most stars?

我家陽臺

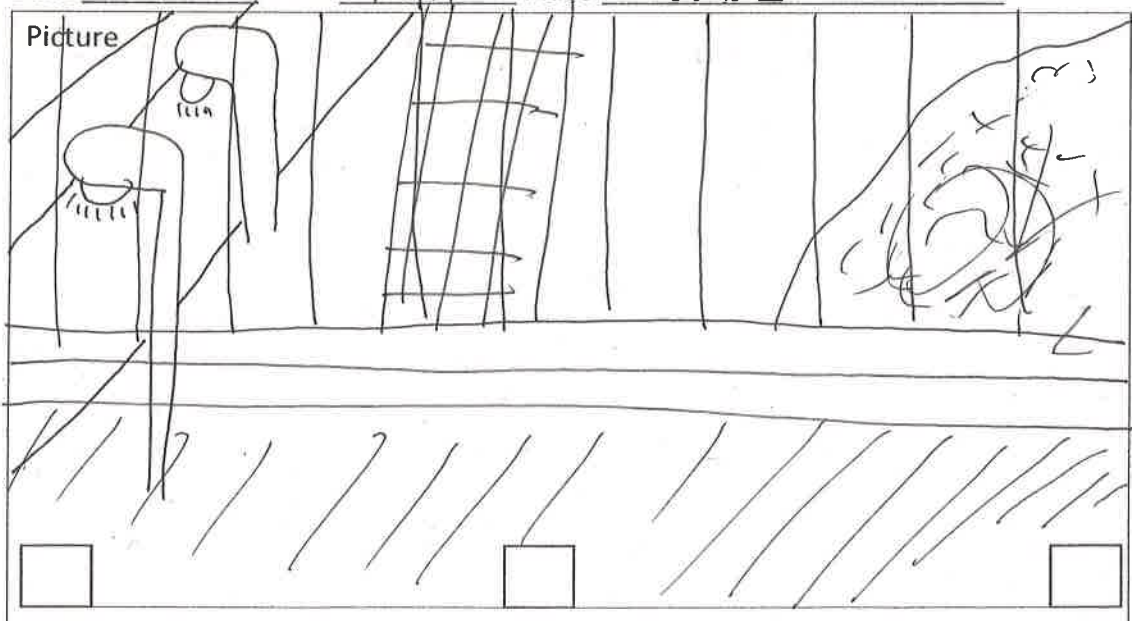
Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth : Data that know the direction of the stars.
2. compass : Know the tools of North, East, South.
3. star : A twinkling light in the sky at night.
4. flashlight : Handheld light-emitting tool.
5. Astrological Displays : Tools used to find the stars in the sky.
6. height angle : Data that know the height of the stars.

Content: night stargazing record

Date: 3/22 Time: 9:00pm Place: 我家陽臺



Art

Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [<https://youtu.be/Tr093rXfc8o>]
2. 星象解說.2021年1月 [<https://youtu.be/fQXpDfW46PM>]

A++

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?

方位角和高度角。

2. What should we prepare for stargazing at night?

防蚊液、星座盤、指北針、外套、玻璃紙、手錶、手機、行動電源。

3. In memory, where do you see the most stars?

君悅酒店。

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth : Data that know the direction of the stars.

2. compass : Know the tools of North, East, South.

3. star : A twinkling light in the sky at night.

4. flashlight : Handheld light-emitting tool.

5. Astrological Displays : Tools used to find the stars in the sky.

6. height angle : Data that know the height of the stars.



Content: night stargazing record

Date: 3/22 Time: 8:00 Place: 頂樓



無星星

😊

Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

At 4p

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?

方位角 和 高度角 ✓

2. What should we prepare for stargazing at night?

方位盤、指北針、外套、手電筒、防蚊液 ✓

3. In memory, where do you see the most stars?

公園、陽臺、屋東、貓空 ✓

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth ✓: Data that know the direction of the stars.

2. compass ✓: Know the tools of North, East, South.

3. Astrological ✓: A twinkling light in the sky at night.

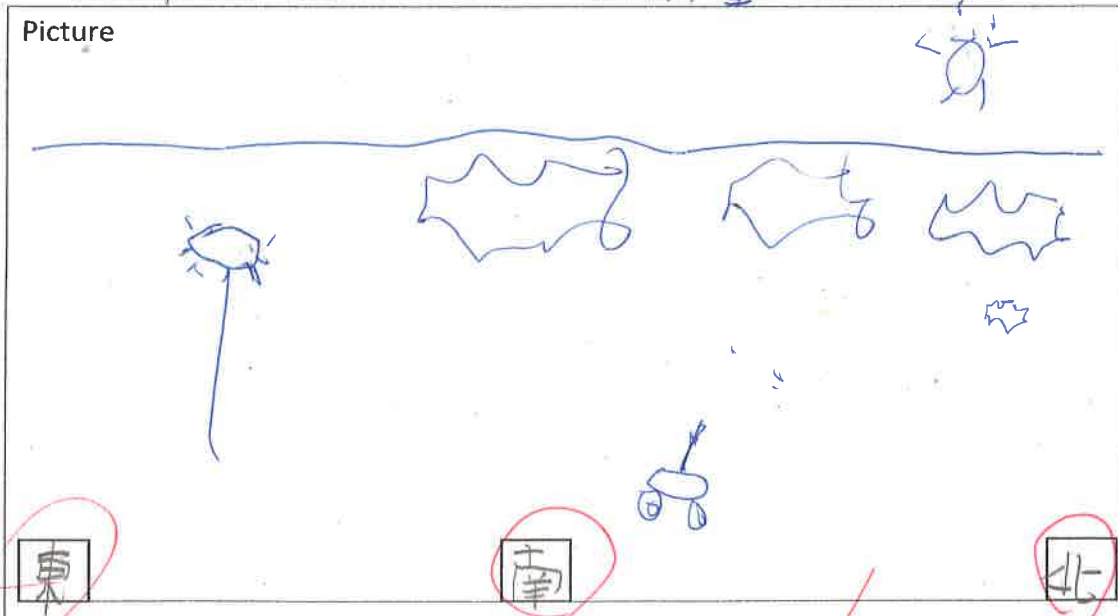
4. flashlight ✓: Handheld light-emitting tool.

5. Star ✓: Tools used to find the stars in the sky.

6. height angle ✓: Data that know the height of the stars.

Content: night stargazing record

Date: 3/15 Time: 9:00 Place: 陽臺



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

A++

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?

方位角、高度角

2. What should we prepare for stargazing at night?

指北針、手電筒、手錶、紅玻璃紙、星座盤、coat、iphone、行充

3. In memory, where do you see the most stars?

阿里山、陽明山、墾丁、貓空

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth Data that know the direction of the stars.

2. compass: Know the tools of North, East, South.

3. star: A twinkling light in the sky at night.

4. flashlight: Handheld light-emitting tool.

5. Astrological Displays: Tools used to find the stars in the sky.

6. height angle: Data that know the height of the stars.

Content: night stargazing record

Date: 3.22 Time: 8:00 Place: 頂樓



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer 資訊

1. What information do we need to describe the position of a star in the sky?

A 方位角、高度角

2. What should we prepare for stargazing at night?

A 手錶、指北針、紅色玻璃紙、手電筒、防蚊液、外套

3. In memory, where do you see the most stars?

阿里山、貓空、陽明山墾丁

Concept

Star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth : Data that know the direction of the stars.

2. compass : Know the tools of North, East, South.

3. star : A twinkling light in the sky at night.

4. Flashlight : Handheld light-emitting tool.

5. Astrological Displays : Tools used to find the stars in the sky.

6. height angle : Data that know the height of the stars.

Content: night stargazing record

Date: 3/20 Time: 8:20 Place: 大樓中庭



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

A

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?
位置
2. What should we prepare for stargazing at night?
方位 高度角
3. In memory, where do you see the most stars?
外套 手機 星座盤

Concept


star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth : Data that know the direction of the stars.
2. compass : Know the tools of North, East, South.
3. star : A twinkling light in the sky at night.
4. flashlight : Handheld light-emitting tool.
5. Astrological Displays : tools used to find the stars in the sky.
6. height angle : Data that know the height of the stars.

Content: night stargazing record

Date: _____ Time: _____ Place: _____

Picture



西

北

東

Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]
2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?

方位角 and 高度角 ✓

2. What should we prepare for stargazing at night?

Compass, Astrological Displays, phone 行動電源, 手錶

3. In memory, where do you see the most stars?

朋友-家人

Japan Concept ✓

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth ✓: Data that know the direction of the stars.

2. compass ✓: Know the tools of North, East, South.

3. star ✓: A twinkling light in the sky at night.

4. flashlight ✓: Handheld light-emitting tool.

5. Astrological Displays ✓: tools used to find the stars in the sky.

6. height angle ✓: Data that know the height of the stars.



Content: night stargazing record

Date: 3/19

Time: 8:30

Place: 桃園



100
..
✓

A++

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information ^{資訊} do we need to describe the position of a star in the sky?

方位角 高度角

2. What should we prepare for stargazing at night?

行動電源、相機、充電線、外套

3. In memory, where do you see the most stars?

南部

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth ✓ Data that know the direction of the stars.

2. Compass ✓ Know the tools of North, East, South.

3. Star ✓ : A twinkling light in the sky at night.

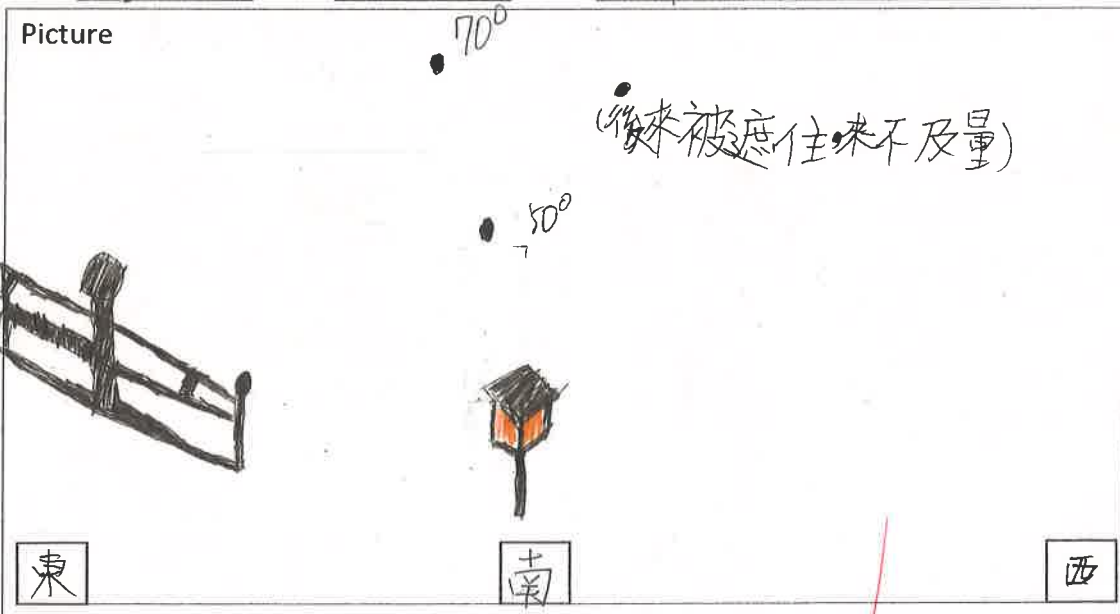
4. flashlight ✓ : Handheld light-emitting tool.

5. Astrological Displays ✓ : Tools used to find the stars in the sky.

6. height angle ✓ : Data that know the height of the stars.

Content: night stargazing record

Date: 3/20 Time: 19:16 Place: 指南宮



110
😊

Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

A++

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

資訊 描述 位置

1. What information do we need to describe the position of a star in the sky?

The azimuth and the height angle.

2. What should we prepare for stargazing at night?

We need to prepare the Astrological Displays, flashlight, watch, compass, thick jacket,

3. In memory, where do you see the most stars?

The gousheng and the six lucky village.

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth : Data that know the direction of the stars.

2. compass : Know the tools of North, East, South.

3. star : A twinkling light in the sky at night.

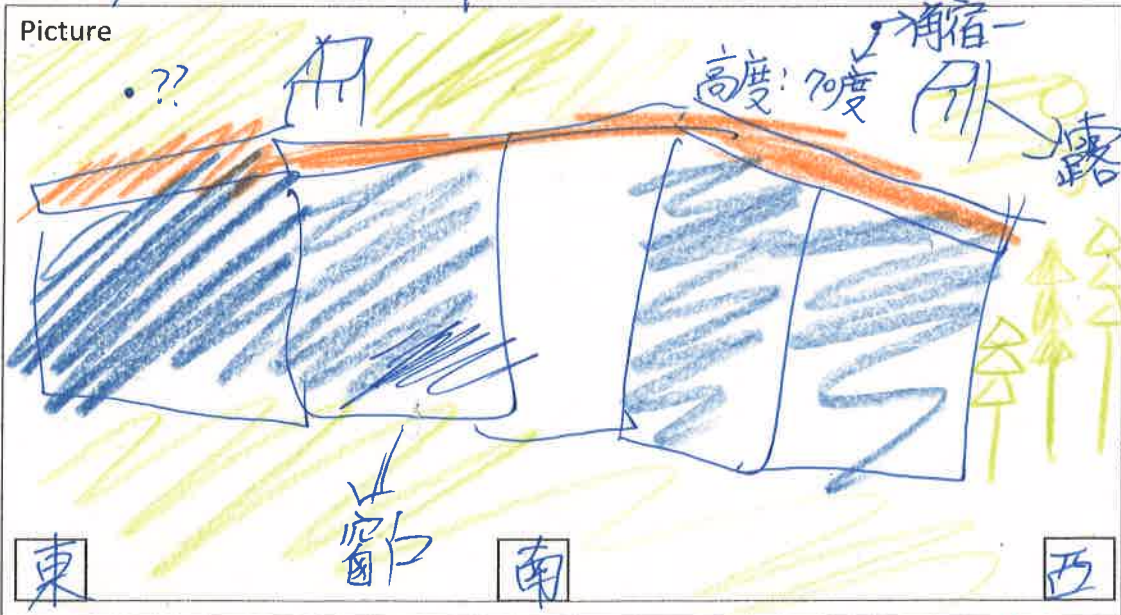
4. flashlight : Handheld light-emitting tool.

5. Astrological Displays : tools used to find the stars in the sky.

6. height angle : Data that know the height of the stars.

Content: night stargazing record

Date: 3/20 Time: 7:35 pm Place: 明月茶館



Think: Let's watching the videos

1. 綻放真台灣: 星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說. 2021年1月 [https://youtu.be/fQXpDfW46PM]

A4

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?

azimuth and height angle

2. What should we prepare for stargazing at night?

compass, flashlight, coat, iphone

3. In memory, where do you see the most stars?

墾丁

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth : Data that know the direction of the stars.

2. compass : Know the tools of North, East, South.

3. star : A twinkling light in the sky at night.

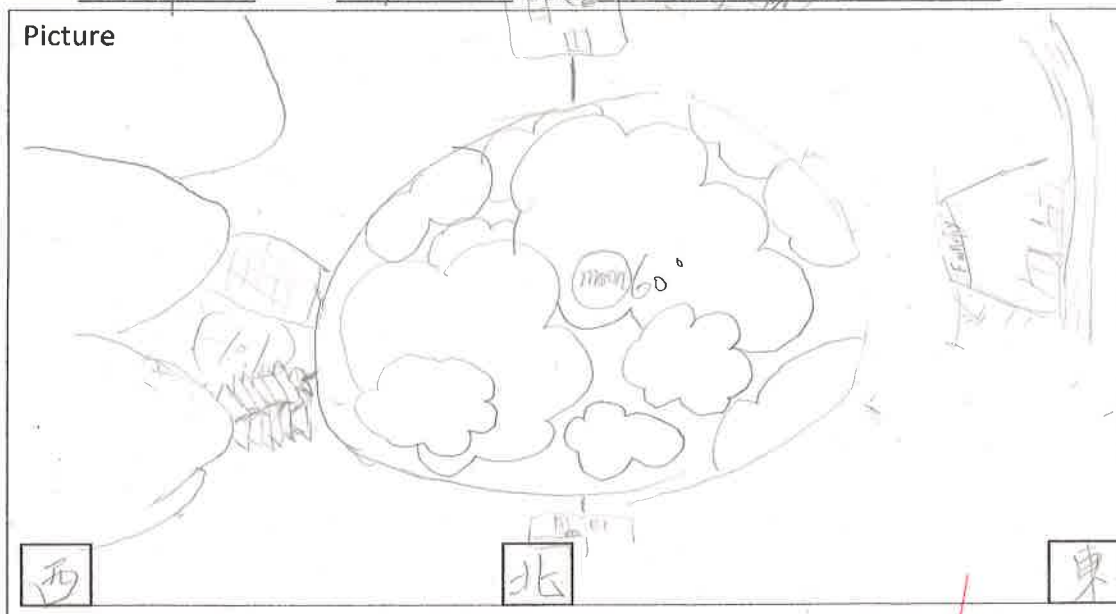
4. flashlight : Handheld light-emitting tool.

5. Astrological displays : Tools used to find the stars in the sky.

6. height angle : Data that know the height of the stars.

Content: night stargazing record

Date: 3/19 Time: 9:00 Place: 百樓(家)



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

Unit 1 Beautiful starry sky - Observing the starry sky

137億年前 - 宇宙誕生

Warmer

1. What information do we need to describe the position of a star in the sky?

方位角、高度角

2. What should we prepare for stargazing at night?

外套、手機、紅色玻璃紙、防蚊液、行動電源

3. In memory, where do you see the most stars?

貓空、北海道

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth : Data that know the direction of the stars.

2. Compass : Know the tools of North, East, South.

3. star : A twinkling light in the sky at night.

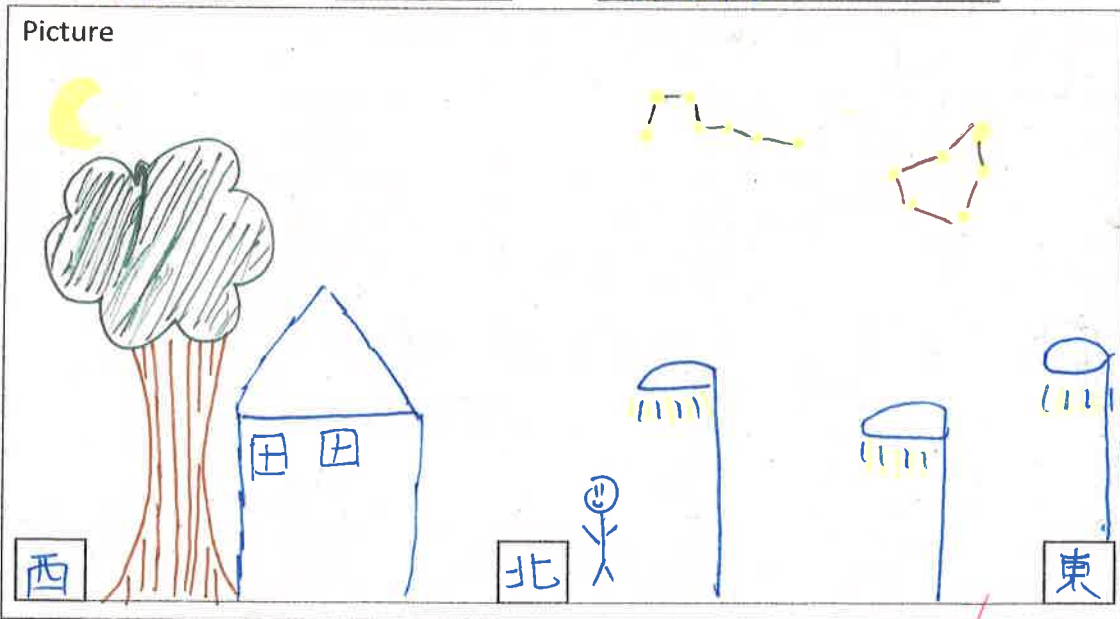
4. flashlight : Handheld light-emitting tool.

5. Astrological Displays: Tools used to find the stars in the sky.

6. height angle : Data that know the height of the stars.

Content: night stargazing record

Date: 3/20 Time: 8:30 PM Place: 我家門口 (中庭)



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

A++

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer 資訊

1. What information do we need to describe the position of a star in the sky? 方位角 高度角
2. What should we prepare for stargazing at night? 手電筒 衣物 手機 防蚊劑 方位盤 指北針
3. In memory, where do you see the most stars? 黑巧星... 還有好多

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth : Data that know the direction of the stars.
2. compass : Know the tools of North, East, South.
3. star : A twinkling light in the sky at night.
4. flashlight : Handheld light-emitting tool.
5. Astrological displays : Tools used to find the stars in the sky.
6. height angle : Data that know the height of the stars.

Content: night stargazing record

Date: 3/9 Time: 9:00 Place: 我家陽台



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [<https://youtu.be/Tr093rXfc8o>]
2. 星象解說.2021年1月 [<https://youtu.be/fQXpDfW46PM>]

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?
方位角, 高度角
2. What should we prepare for stargazing at night?
手電筒, 星座盤, 手錶
3. In memory, where do you see the most stars?
貓空

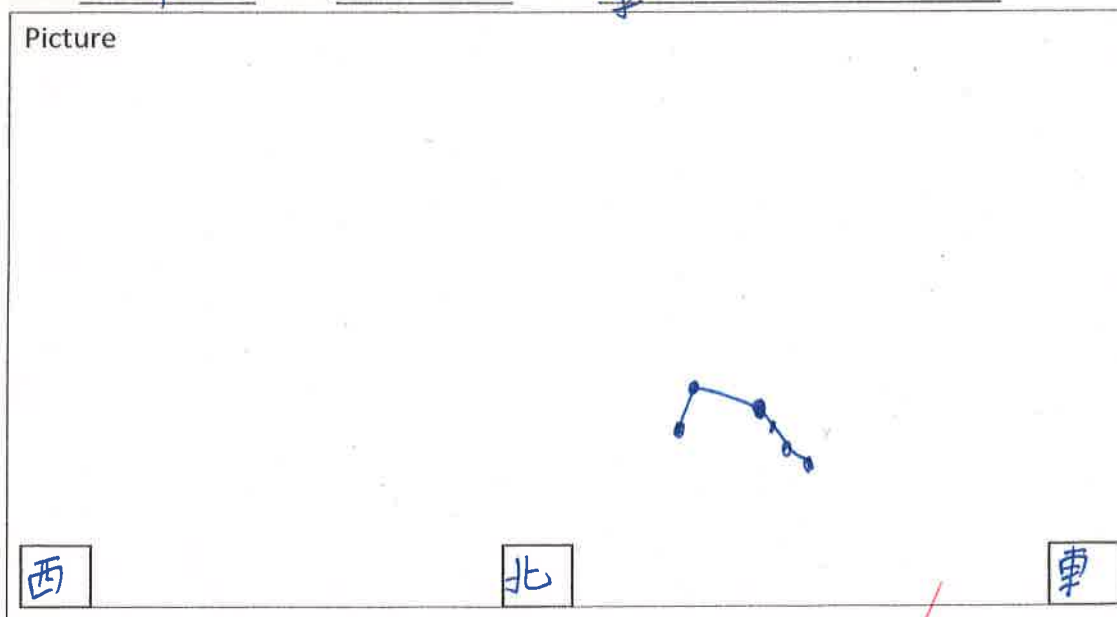
Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth: Data that know the direction of the stars.
2. compass: Know the tools of North, East, South.
3. star: A twinkling light in the sky at night.
4. flashlight: Handheld light-emitting tool.
5. Astrological displays: Tools used to find the stars in the sky.
6. height angle: Data that know the height of the stars.

Content: night stargazing record

Date: 3/24 Time: 9:00 Place: 學校



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]
2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?

方位角 高度角 ✓

2. What should we prepare for stargazing at night?

指北針、手電筒、空氣、星座盤、外套

3. In memory, where do you see the most stars?

阿里山、太平山、台東 ✓

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth ✓ Data that know the direction of the stars.

2. compass ✓ Know the tools of North, East, South.

3. star ✓ A twinkling light in the sky at night.

4. flashlight ✓ Handheld light-emitting tool.

5. Astrological Displays ✓ tools used to find the stars in the sky.

6. height angle : Data that know the height of the stars.

Content: night stargazing record

Date: 3/20 Time: 8:34 Place: ○



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?

The azimuth and the height angle.

2. What should we prepare for stargazing at night?

The compass - flashlight - sweater - coat - cell phone.

3. In memory, where do you see the most stars?

The top of 阿里山 ali mountain.

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth Data that know the direction of the stars.

2. compass Know the tools of North, East, South.

3. star A twinkling light in the sky at night.

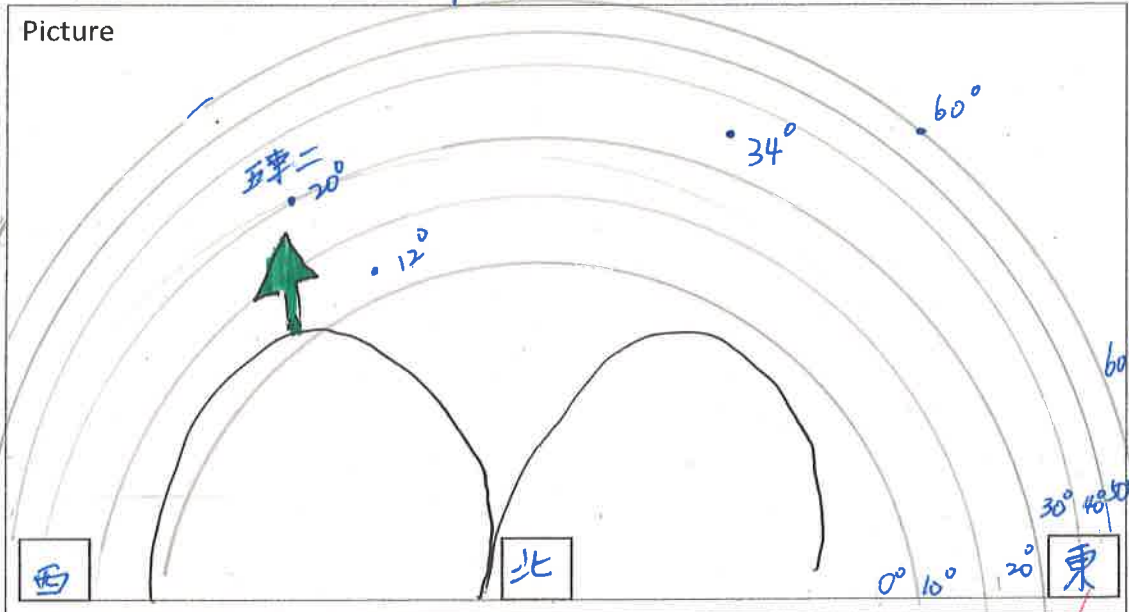
4. flashlight Handheld light-emitting tool.

5. Astrological Displays Tools used to find the stars in the sky.

6. height angle Data that know the height of the stars.

Content: night stargazing record

Date: 3/20 Time: 8:00 p.m. Place: 宜蘭家頂樓



Think: Let's watching the videos

- 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]
- 星象解說.2021 年 1 月 [https://youtu.be/fQXpDfW46PM]

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?

高度角、方位角

2. What should we prepare for stargazing at night?

flashlight Astrological Displays coat compass red glass paper, watch

3. In memory, where do you see the most stars?

阿摩山、大孛山

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth ✓ : Data that know the direction of the stars.

2. compass ✓ : Know the tools of North, East, South.

3. Star ✓ : A twinkling light in the sky at night.

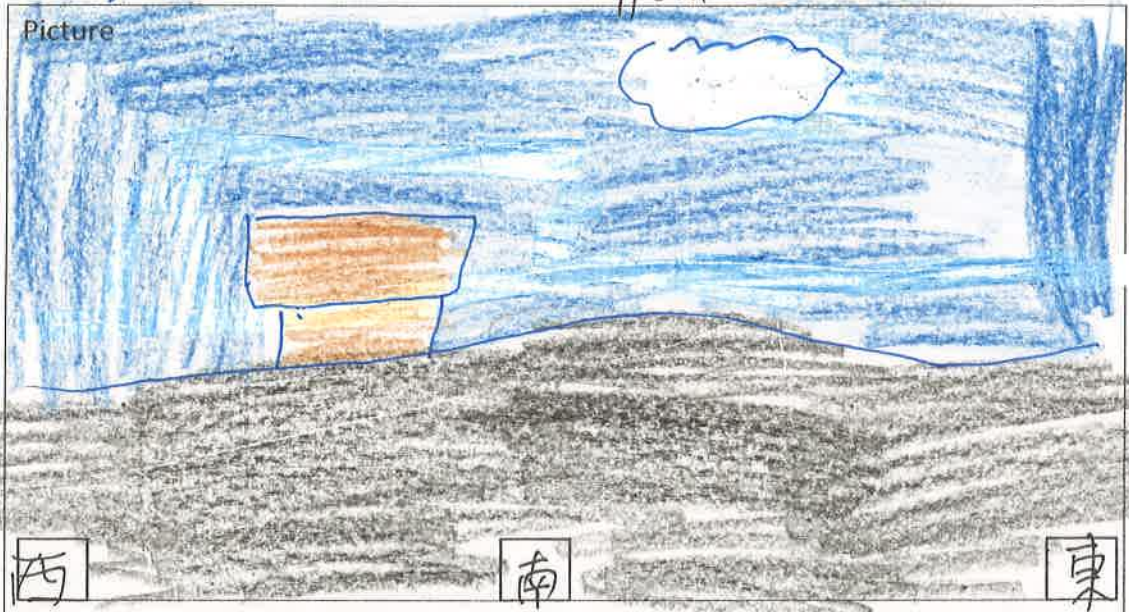
4. flashlight ✓ : Handheld light-emitting tool.

5. Astrological Displays ✓ : Tools used to find the stars in the sky.

6. height angle ✓ : Data that know the height of the stars.

Content: night stargazing record

Date: 7/19 Time: 9:00 Place: home



100
:-)
✓

Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]

AT

Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?
方位角、高度角
2. What should we prepare for stargazing at night?
手機、指北針、星座盤、外套、玻璃紙、防蚊液、手電筒
3. In memory, where do you see the most stars?
美國

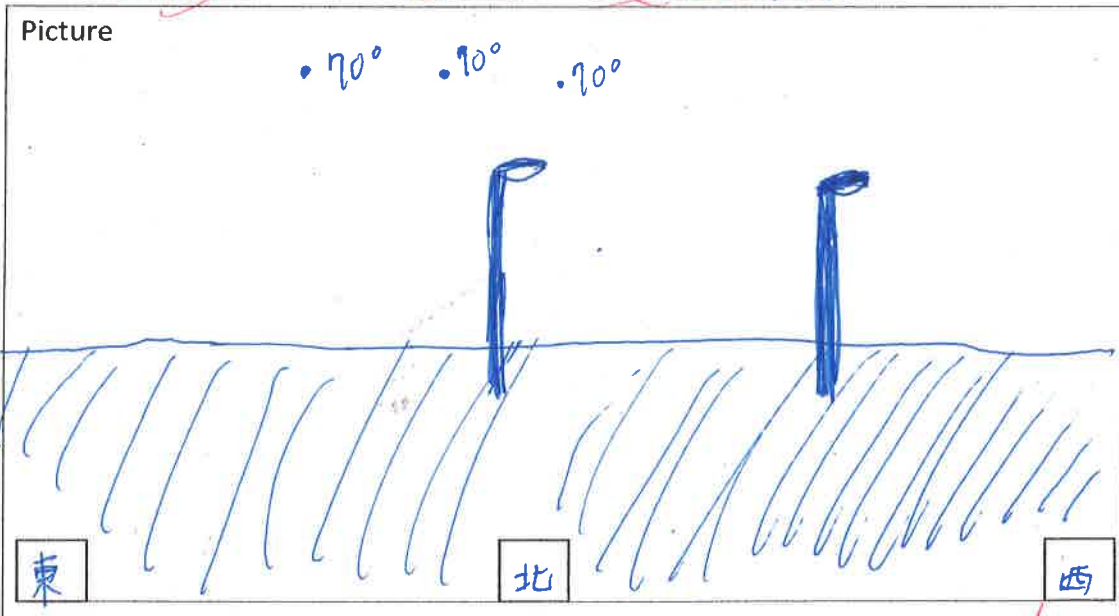
Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. _____ azimuth _____: Data that know the direction of the stars.
2. _____ compass _____: Know the tools of North, East, South.
3. _____ star _____: A twinkling light in the sky at night.
4. _____ flashlight _____: Handheld light-emitting tool.
5. Astrological Displays: Tools used to find the stars in the sky.
6. _____ height angle _____: Data that know the height of the stars.

Content: night stargazing record

Date: 3/19 Time: 9:00 Place: 河提停車場



Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]
2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]



Unit 1 Beautiful starry sky - Observing the starry sky

Warmer

1. What information do we need to describe the position of a star in the sky?

azimuth, height angle

2. What should we prepare for stargazing at night?

flashlight, Astrological Displays, coat, compass, red glass paper, watch.

3. In memory, where do you see the most stars?

墾丁, 阿里山

Concept

star (恆星)	Astrological Displays (星座盤)	height angle (高度角)
azimuth (方位角)	compass (指北針)	flashlight (手電筒)

1. azimuth : Data that know the direction of the stars.

2. compass : Know the tools of North, East, South.

3. star : A twinkling light in the sky at night.

4. flashlight : Handheld light-emitting tool.

5. Astrological Displays : Tools used to find the stars in the sky.

6. height angle : Data that know the height of the stars.

Content: night stargazing record

Date: 3/19 Time: 9:00 Place: My home

Picture

Think: Let's watching the videos

1. 綻放真台灣：星空搜捕手 [https://youtu.be/Tr093rXfc8o]

2. 星象解說.2021年1月 [https://youtu.be/fQXpDfW46PM]