Chapter 8: Lines and angles

Types of lines.

> Perpendicular lines make right-angled corners.

| vertical | horizontal | diagonal or oblique | parallel | perpendicular |
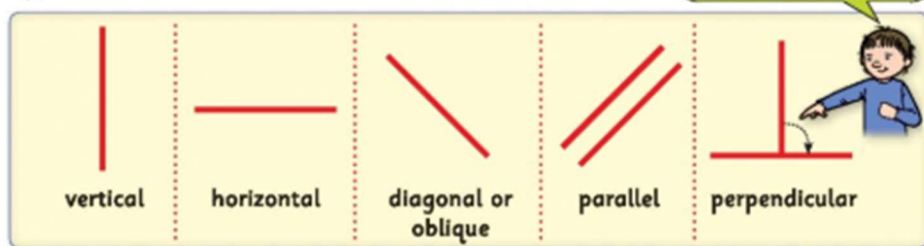
1. Look at the following pictures. Discuss, then answer the questions.

(a) (b) (c) (d)
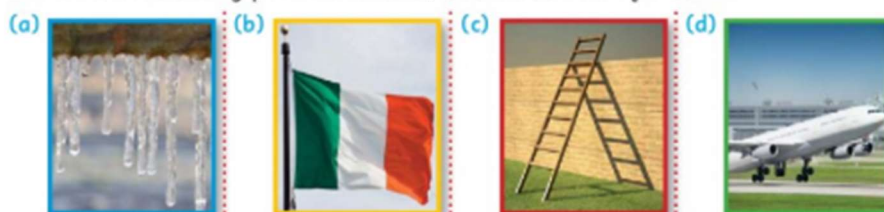
(a) Each icicle is hanging in a _____ position. The icicles are _____ to each other but they are _____ to the roof.

(b) The flagpole is standing in a _____ position. The flag is blowing in a _____ position. The colours on the flag are _____ to each other.

(c) The ladder is leaning against the wall in a _____ position. The sides of the ladder are _____ to each other. The rungs of the ladder are _____ to each other. The rungs of the ladder are _____ to the sides of the ladder.

(d) The aeroplane is in a _____ position. The runway is in a _____ position.

2. Find examples of the following lines at home or in school. Name them.

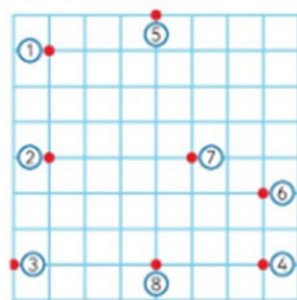| vertical	horizontal	diagonal	parallel	perpendicular

Lines and angles

1. Look at the picture. Discuss. Then answer the questions.
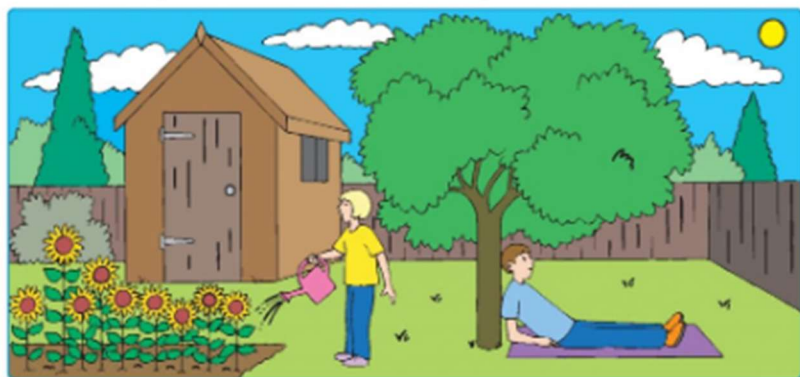
(a) The sunflowers and the tree trunk are all in a _____ position.

(b) The boy's legs are in a _____ position, but his body is in a _____ position.

(c) The sides of the roof are _____ .

(d) The sunflowers and the tree trunk are all _____ to each other.

(e) The rug is in a _____ position. It is _____ to the tree.

(f) The girl and the sunflowers are _____ to each other.

(g) Write 5 sentences of your own about the picture.

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2. Follow the instructions to make lines. Use a ruler! Name the type of line.

(a) Join (1) and (2) with a ◀━━ . _vertical_

(b) Join (3) and (4) with a ◀━━ . _____

(c) Join (5) and (6) with a ◀━━ . _____

(d) Join (2) and (7) with a ◀━━ . _____

(e) Join (5) and (8) with a ◀━━ . _____

(f) The yellow line is _____ to the pink line.

(g) The yellow line is _____ to the green line.

(h) The pink line is perpendicular to both the _____ and _____ lines.

What angle is being made in each yoga pose?

(a)

_____

(b)

_____

(c)

_____

(d)

_____

(e)

_____

(f)

_____

2

Chapter 25: Time 2 – Hours and minutes

1. We use **hr** for hour (**hrs** for hours) and **mins** for minutes.

A children's soccer match lasted for 75 minutes. How many hours and minutes was that?

_____ hr _____ mins

2. Write the following minutes as **hrs** and **mins**.

(a) 80 mins
___ hr ___ mins

(b) 95 mins
___ hr ___ mins

(c) 100 mins
___ hr ___ mins

(d) 89 mins
___ hr ___ mins

3. Write the following **hrs** and **mins** as **mins**.

(a) 1 hr 30 mins
_____ mins

(b) 1 hr 25 mins
_____ mins

(c) 1 hr 17 mins
_____ mins

(d) 1 hr 43 mins
_____ mins

4. How many minutes are there in each of these?

(a) $1\frac{3}{4}$ hrs = _____ mins

(b) $2\frac{1}{2}$ hrs = _____ mins

(c) $1\frac{1}{5}$ hrs = _____ mins

5. Complete the table.

John and his dad went to Croke Park to a match.

They left home at [1:35] and got to the bus stop after 8 mins.

The bus came 7 minutes later and the bus journey to Croke Park took 35 mins.

They were in their seats in the stand 16 minutes later.

1.	Left home at	[:]
2.	Got to bus stop	[:]
3.	Got on bus at	[:]
4.	Got off bus at	[:]
5.	Got to their seats	[:]
6.	The whole journey took	___ hr ___ mins.

6. A television programme began at [2:40] and lasted for 1 hour 35 mins. At what time did it end? [:]

7. A football match started at [3:17] and finished at [4:36]. It lasted for _____ minutes.

Challenge

Kirk and Kieran cycled for 96 mins on Monday and from [2:45] to [4:15] on Tuesday. How long did they spend cycling over the two days? (i) _____ hrs and _____ mins or (ii) _____ mins

Time 2 – Timetables

A Television programme guide

1. **News** lasts for _____ mins.
2. **Story Time** lasts for _____ mins.
3. The first film lasts for _____ hr _____ mins.
4. The second film lasts for _____ hr _____ mins.
5. By how many minutes is one film longer than the other? _____ mins.
6. The nature programme lasts _____ mins.
7. **Long Ago** lasts for _____ mins.
8. _____ minutes is given to **Sport for Everyone**.
9. _____ minutes is given to **Let's Paint**.
10. _____ is the longest programme.
11. Dad got home 1 hr 53 minutes after the 2nd film ended. It was then [:].
12. Laura watched **Let's Paint** and **Story Time**. She spent _____ mins watching television.

CTV 15	
1:15	News
1:24	Let's Paint
1:53	Story Time
2:18	Sport for Everyone
3:05	Brave Ranger (film)
4:32	Space School (film)
6:17	Nature for All
7:03	Long Ago
8:00	Closedown

B

Train – Dublin to Tralee	
Dublin	7:52
Portlaoise	8:49
Limerick Junction	9:34
Mallow	9:51
Rathmore	10:29
Killarney	10:43
Tralee	11:06

1. The train took _____ minutes to get to Portlaoise.
2. It took _____ hr _____ mins to get to Limerick Junction.
3. From Portlaoise to Rathmore took _____ hr _____ mins.
4. From Mallow to Tralee took _____ hr _____ mins.
5. It took _____ hrs _____ mins to go from Dublin to Killarney.
6. The journey from Dublin to Tralee took _____ hrs _____ mins.
7. The shortest time between one stop and the next was _____ mins.
8. The longest time between stops was from _____ to _____.
9. A passenger got on the train at Portlaoise to go to Tralee. The journey took _____ hrs _____ mins.
10. How long does it take to go from Limerick Junction to Tralee? _____ hr _____ mins.
11. A car left Dublin at [7:58] and got to Mallow at [9:47].
    (a) The journey took _____ hr _____ mins.
    (b) The _____ was faster by _____ mins.

Challenge Julie went from Dublin to Tralee on a train. She returned that evening. If both journeys took the same time, how long did Julie spend travelling by train? _____ hrs _____ mins.