# Mathematics Assessment (CfE) - Level 1

(MNU 1 - 22a)

I can use appropriate vocabulary to describe the likelihood of events occurring, using the knowledge and experiences of myself and others to guide me.

Answer all the questions below using the **probability line** shown.

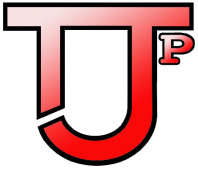**For example**, the statement :- I am nine years old. Next year I will be twelve is **impossible**.

| impossible | unlikely | 50 - 50 even chance | likely | certain |
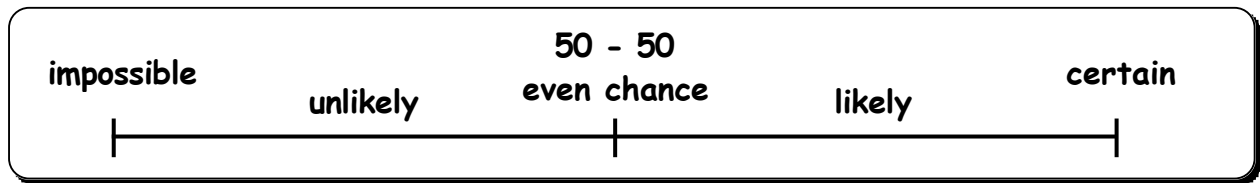
1. a   If today is Thursday, yesterday was Sunday.

    b   If I am seven years old, next birthday I will be eight.

    c   It will snow in Spain in the month of July.

    d   Toss a coin into the air and it will land heads up.

    e   In Scotland it will rain in the month of April.

    f   The next pupil to come into the class will be a girl.

    g   The teacher will not give me any homework this year.

    h   If I weigh 40 kg and go on a diet, I will lose 35 kg.

    i   If I choose a card from a pack it will be a red one.

    j   Tomorrow I will learn a new language and speak it fluently.

    k   If I dive into the sea, I will get wet.

    l   Inverness Cally Thistle will win the Scottish Cup.

    m   If I roll a dice it will show a number smaller than 6.

2. My bag contains **1 red marble**, **10 green marbles** and **3 blue marbles**.

    a   What is the chance of me picking, at random, a **red marble** ?

    b   What is the chance of me picking, at random, a **blue marble** ?

    c   What is the chance of me picking, at random, a **green marble** ?

    d   What is the chance of me picking, at random, a **yellow marble** ?

# Mathematics Assessment (CfE) – Level 1

(MTH 1 - 21a)

Using technology and other methods, I can display data simply, clearly and accurately by creating tables, charts and diagrams, using simple labelling and scale.

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1. Some pupils were asked what day of the school week they liked best.

The results are shown in the table.

Copy the **bar graph** and complete it to show this information.

Day	No. of pupils
Monday	4
Tuesday	2
Wednesday	1
Thursday	5
Friday	7

Favourite Day

Number of Pupils

4
3
2
1

Mon   Tue   Wed   Thu   **Fri**

Day

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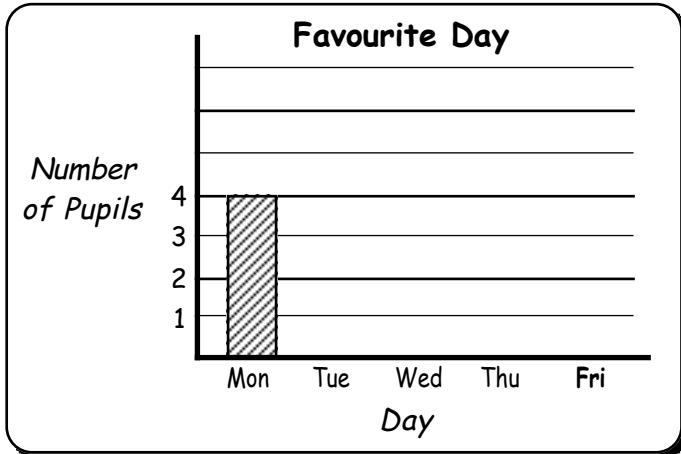
2. A group of children were asked what games they played most.

The results are shown in the table.

Draw a **pictograph** to show this information.

(Use ✕ to represent 4 children).

X-Box	- 16	Play Station 2	- 4
PC	- 9	Play Station 3	- 15
Nintendo	- 7	Board Games	- 3

**3.** A survey was conducted to find out what the most popular pastime was for a group of boys.

The results are shown opposite.

a Make a **tally table** using these results.

b Use your tally table to create a **pictograph**.

c Draw a **bar graph** using this information.

chess	football	gaming	internet
football	gaming	drawing	internet
gaming	football	gaming	TV
TV	internet	football	chess
gaming	TV	gaming	TV
football	gaming	football	gaming

---

4. Using one of the above questions, put the information given into a computer **database** or **spreadsheet** and make an appropriate table, chart and/or diagram to show this information.
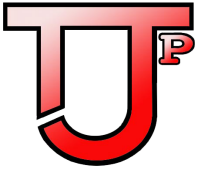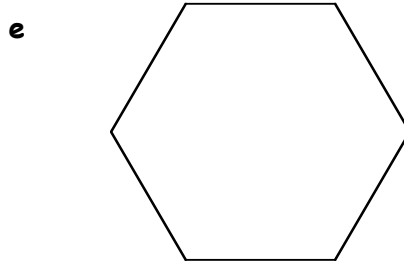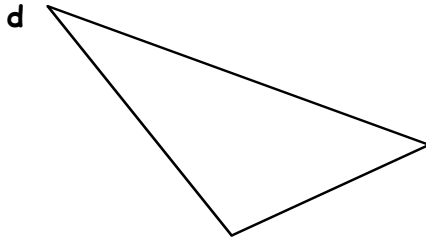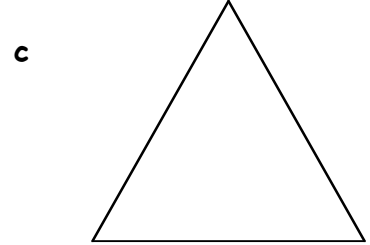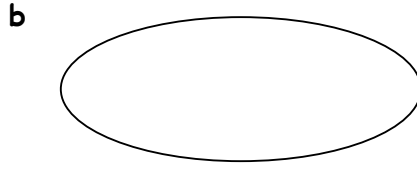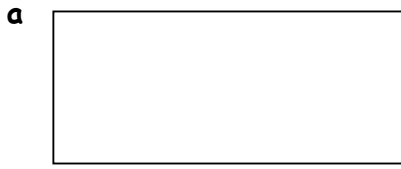
Mathematics Assessment (CfE) - Level 1
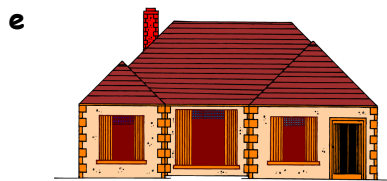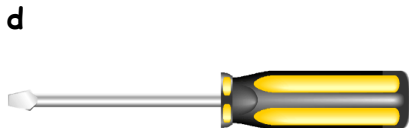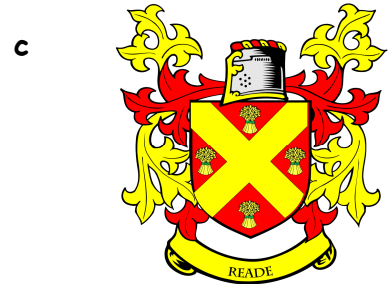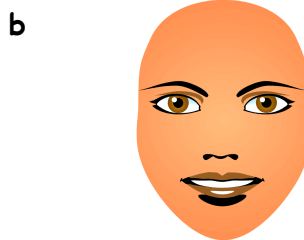
I have explored symmetry in my own and the wider environment and can create and recognise symmetrical pictures, patterns and shapes.

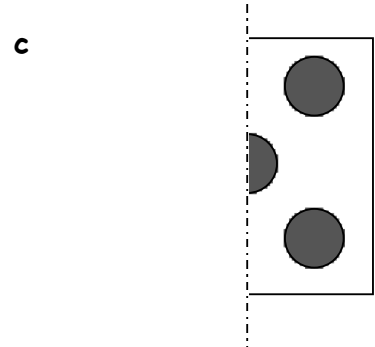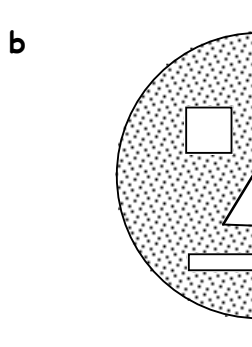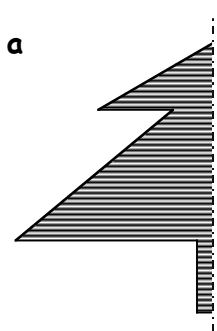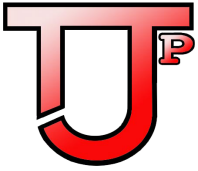1. Which of the shapes below are symmetrical ? (Write Yes or No).

   a   b   c

   d   e   f

2. Which of the pictures below are symmetrical ? (Write Yes or No).

   a   b   c

   d   e   f

3. Each symmetrical picture below is only half completed.

   Copy each figure neatly and **complete** it.
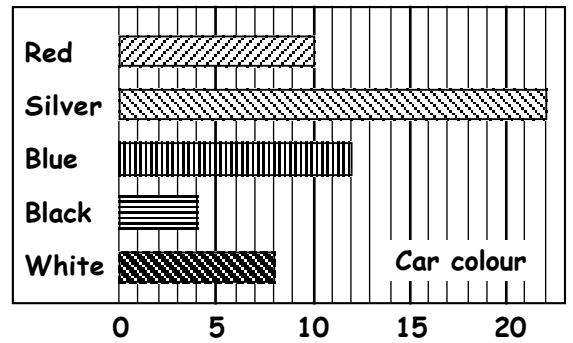
   a   b   c

Mathematics Assessment (CfE) - Level 1

(MNU 1 - 20a)

I have explored a variety of ways in which data is presented and can ask and answer questions about the information it contains.

1. This bar graph shows the colour of the cars in a car park in Edinburgh one day.

a How many **red** cars were there ?

b How many **silver** cars ?

c How many people parked a **white** car ?

d How many **more blue** cars were there than **black** ?

e How many **less white** cars were there than **silver** ones ?

2. The table shows the number of kilometres Alice ran each day as she practised for a marathon race.

a How many kilometres did Alice run on **Saturday** ?

b How many kilometres did she run on :–

(i) Sunday

(ii) Monday

(iii) Wednesday ?

c How many kilometres did Alice run **altogether** ?

DAY	km
Saturday	12
Sunday	10
Monday	7
Tuesday	8
Wednesday	6

3. This table shows the different costs for a train ticket from **March** to **May** for adults and children.

	March	April	May
Adult	£18	£32	£25
Child	£12	£19	£16

a What would it cost for :–

(i) an **adult** in **March**

(ii) a **child** in **April** ?

b How much would it cost altogether for Mr Wallace and his son to travel in **March** ?

c How much would it cost Mr and Mrs Davies to travel in **May** ?

d How much more expensive would it be for Mr Robertson to travel on the **2nd of April** than on the **30th of March** ?
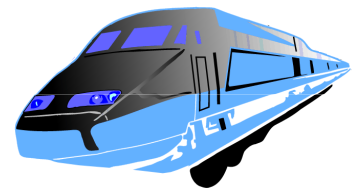
4. Mr and Mrs Jones were arranging the meal for their daughter's wedding.

The hotel offered them two choices.

	Starter	Main	Desert
Menu 1	Soup	Chicken	Cheescake
Menu 2	Salad	Fish	Ice-cream

a What was the starter in **Menu 1** ?

b What was the **main course** in **Menu 2** ?

c Write down the **deserts** listed for both **Menus**.

5. A group of people who went to Europe on holiday were asked to say which country they had visited.

Key: stands for 8 people

Spain	
Portugal	
France	
Italy	
Germany	

a Which European country was **most** popular ?

b Write down the number of people who visited :-

   (i) Spain   **(ii)** Portugal   **(iii)** France   **(iv)** Italy   **(v)** Germany.

c How many **fewer** people visited France than Italy ?
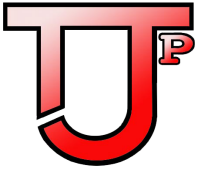
d How many people were questioned ?

6. Comfy Tours prices are shown for the different tours that they offer.

a How much would it cost for :–

	Mon – Thu		Week-end	
	Adult	Child	Adult	Child
City	£3	£1	£4	£2
Historical	£4	£2	£5	£3
Full	£8	£5	£9	£6

   (i) one adult, City tour on a Monday ?

   (ii) one child, Historical tour on a Sunday ?

   (iii) two adults, Full tour on a Saturday ?

b Mr Dobbs takes his wife and his son on a Full tour on Tuesday.

   How much did it cost altogether ?

c Mrs Jack and her daughter paid a **total** of £8 for their tour.

   Which tour did they go on and when did they go ?
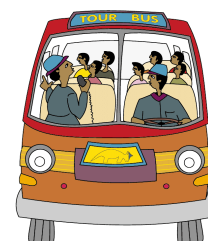
Mathematics Assessment (CfE) - Level 1

I have developed an awareness of where grid reference systems are used in everyday contexts and can use them to locate and describe position.

1. Fairground prizes are hanging on a board.

    The teddy bear is at grid reference **B3**.

    Write down a grid reference for :–

    a   the robot   **b**   the racquet

    c   the soldier   **d**   the sweets.
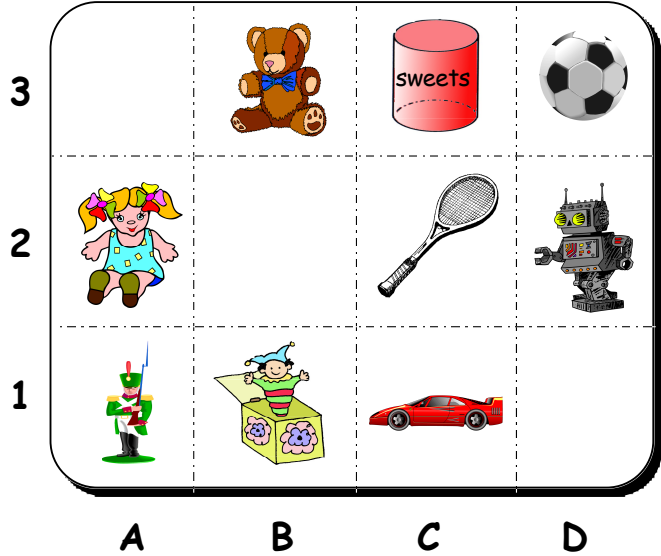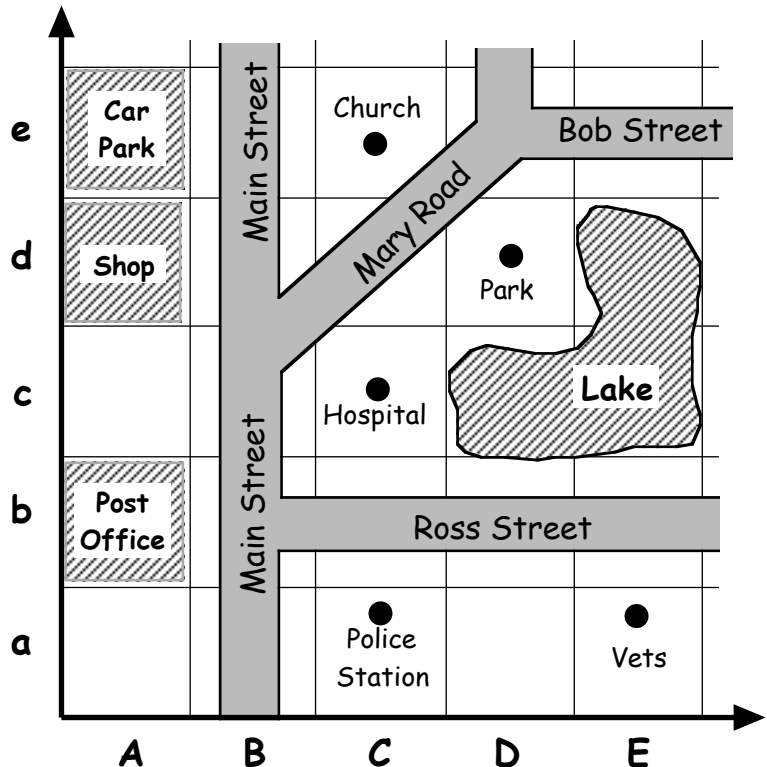
2. Write down what is on grid reference :–

    a   A2   **b**   C1

    c   D3   **d**   B1.

3. Write down all the grid references where there are **no** prizes.

4. This map shows that there is a church at grid reference **C e**.

    Write down a grid reference for :–

    a   the vets

    b   the post office

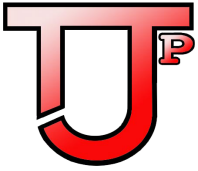   **c**   the shop

    d   the hospital.

5. Write down what is on grid reference :–

    a   A e   **b**   C a

    c   C e   **d**   D d.

6. Write down all 3 grid references for where **Lake** lies.

7. What street is likely to be on grid reference :–

    a   B f   **b**   F e ?

Mathematics Assessment (CfE) – Level 1

(MNU 1 - 20b)

I have used a range of ways to collect information and can sort it in a logical, organised and imaginative way using my own and others' criteria.

* As part of this assessment, pupils should be encouraged to carry out their own survey and write a simple report into its findings. Encourage as diverse and interesting a survey as possible.

1. A survey was conducted to find out what was the most popular breakfast drink in a class.

   The results are shown in the table.

Tea	Orange	Milk	Water
Milk	Orange	Orange	Orange
Apple	Milk	Apple	Apple
Orange	Apple	Tea	Milk
Water	Water	Milk	Apple
Orange	Orange	Water	Water

   Copy this **tally table** and **complete** it to show these results.

Drink	Tally	Number
Apple		
Orange		COPY
Water		
Tea		
Milk		

2. A group of people from Britain were asked to say which country they lived in.

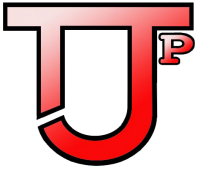 | Ireland | Scotland | Wales | Scotland | Wales |
Wales	Ireland	Scotland	Wales	Wales
Scotland	Scotland	Wales	Scotland	Scotland
England	Scotland	Ireland	Scotland	Scotland
Ireland	Scotland	Scotland	Scotland	England
Scotland	Wales	Scotland	Ireland	Scotland

   Make a tally table to show this information.

3. a As a class, collect information for each pupil under the headings :-

name	boy/girl	height	eye colour	hair colour

   b Make up a **database** showing the information for the class.

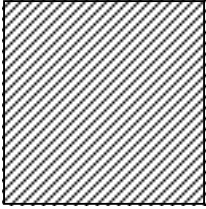   c Write a report pointing out any interesting features.

Mathematics Assessment (CfE) – Level 1

(MTH 1 - 16a)

I have explored simple 3D objects and 2D shapes and can identify, name and describe their features using appropriate vocabulary.

1. Name each of the following **2D** shapes :–
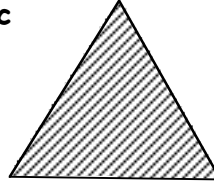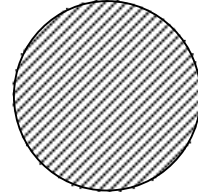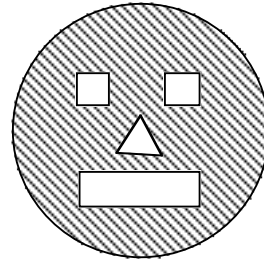
   a   b   c   d

2. List all the shapes used to make this face drawing.

   (For example, the mouth is a ....).

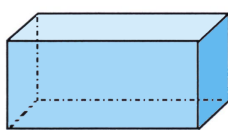3. a   How many sides are there in a **square** ?

   b   Describe how a **rectangle** is <u>different</u> from a **square**.
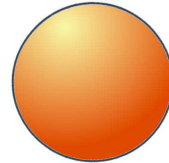
4. Name each of the following **3D** shapes :–
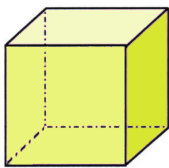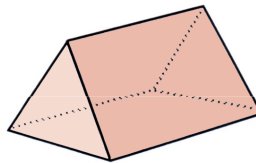
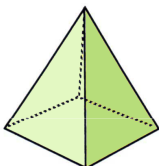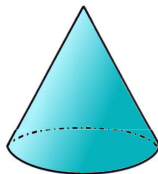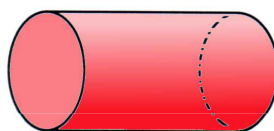   a   b   c   d

   e   f   g

5. Which of the above 7 shapes can be **rolled** ?

6. How many faces are there in a :-   a   cube   b   square based pyramid ?
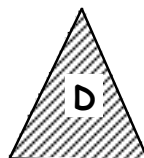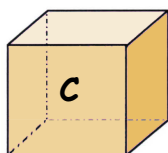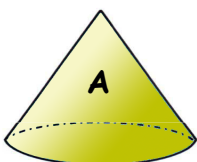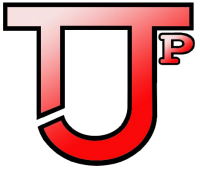
7. How many corners (vertices) has a :-   a   cuboid   b   triangular prism ?

8. Which of these shapes are **2D shapes** and which of them are **3D shapes** ?

   A   B   C   D   E   F
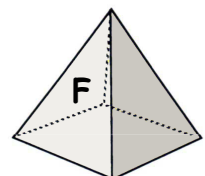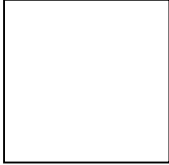
Mathematics Assessment (CfE) - Level 1

(MTH 1 - 16b)

I can explore and discuss how and why different shapes fit together and create a tiling pattern with them.
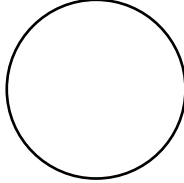
This is a WRITE ON assessment - spare squared paper and spotty paper might be required.

1. Which of the following shapes below would **NOT** make good tiles ?
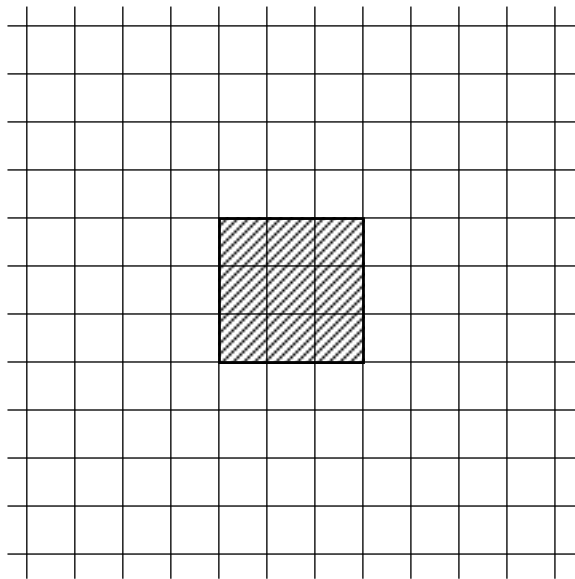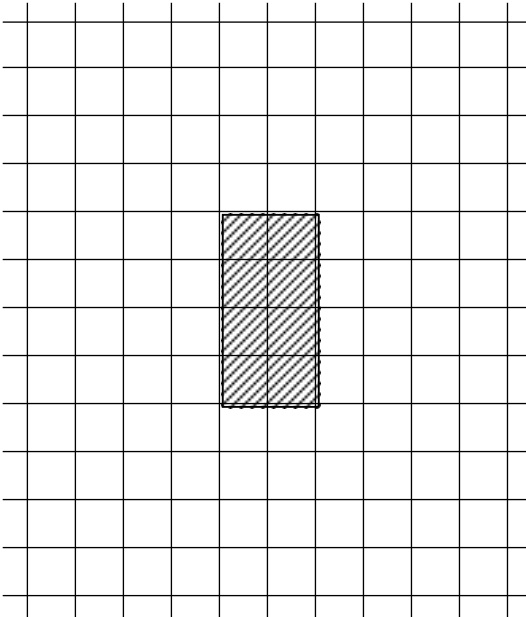
   a   b   c   d

2. Write down why you think the shapes would **not** make good tiles.

3. Surround this square with similar squares to show how it **tiles**.

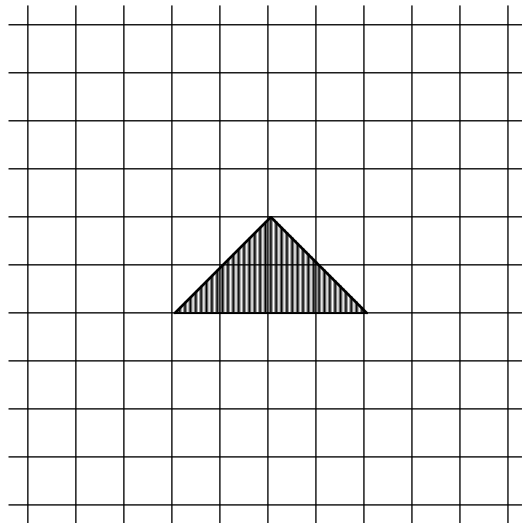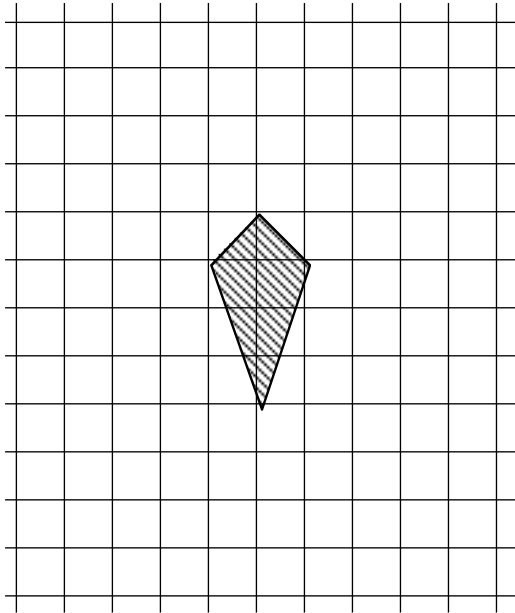4. Surround each of these shapes with similar shapes to show how each one **tiles**.
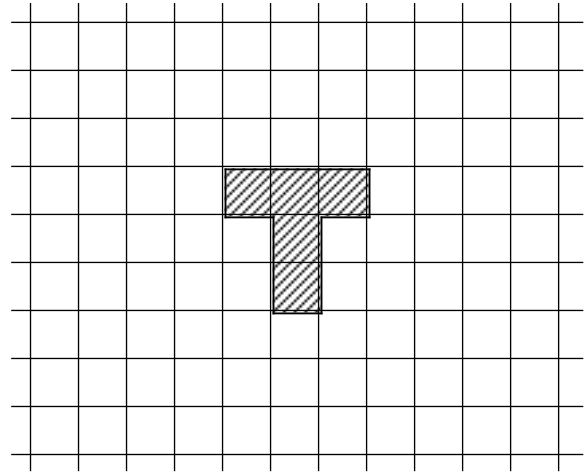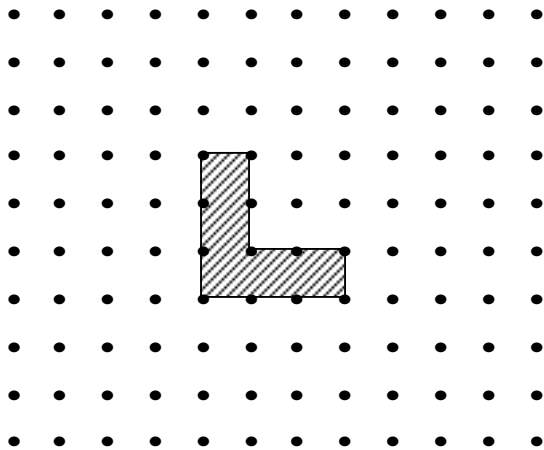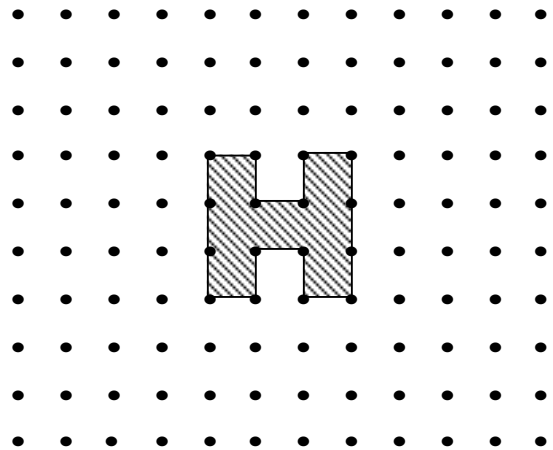
   a

   b

4. c

d

5. Show how these shapes can **tile** by surrounding each one with at least **6 identical** shapes.
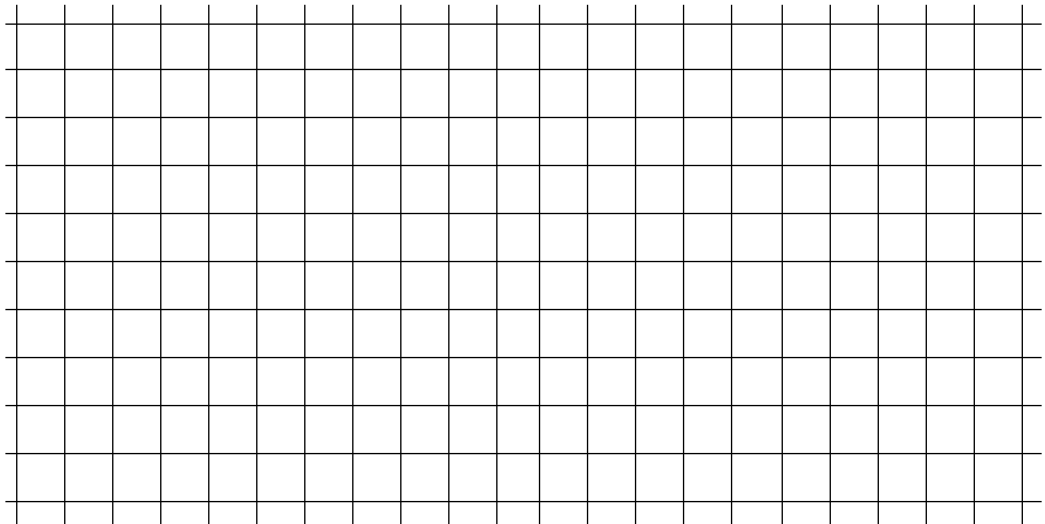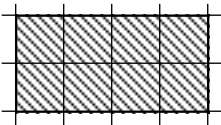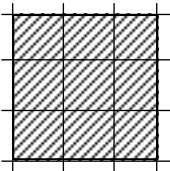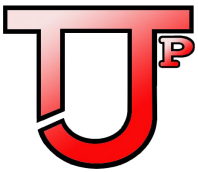
a

b

6. Use **six** identical **squares** and **six** identical **rectangles** on one tiling to show that both these shapes **together** would create a good tiling with no gaps.

Mathematics Assessment (CfE) - Level 1

(MTH 1 - 17a)

I can describe, follow and record routes and journeys using signs words and angles associated with direction and turning.

1. Lucy is sitting in the middle of a several children who surround her.

    Lucy is looking at Jim.

    a Lucy makes a **quarter turn** clockwise.

    Who is she now looking at ?

    b Lucy looks at Chris.
    She turns **anti-clockwise**.

    Who is the first person she will see ?

    c Lucy looks back towards Chris.
    She makes a **half turn clockwise**.

    Who is she now looking at ?

    d Lucy looks at Ali. She makes a **90° turn anti-clockwise**.

    Who is she now facing ?

    e Lucy looks at Tod. She turns to look at Jim. Describe her movement.
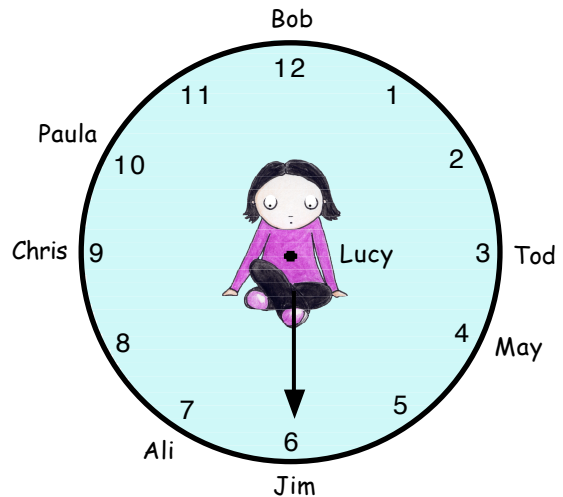
2. Describe Jane's two journeys shown below (use left, right, forward etc...) :–

    a

    b
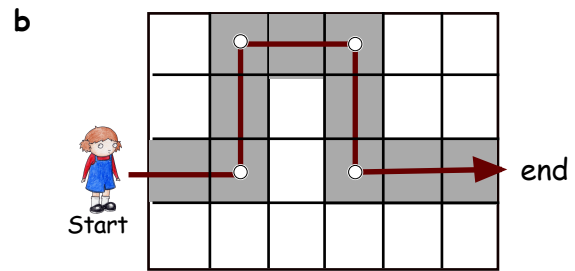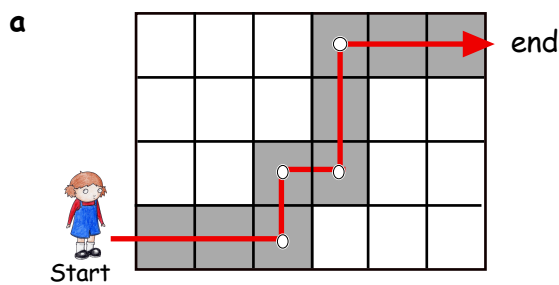
3. **a** Copy the arrows as shown in the diagram.

    b Fill in the directions, **South, East** and **West** on your diagram.

    c I am facing West. I make a **90° turn anti-clockwise**.

    Which way am I now facing ?
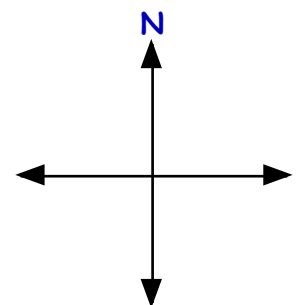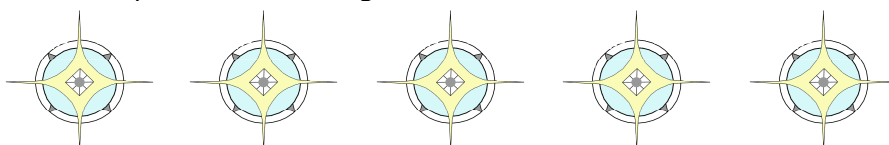
4. Look at this street map.
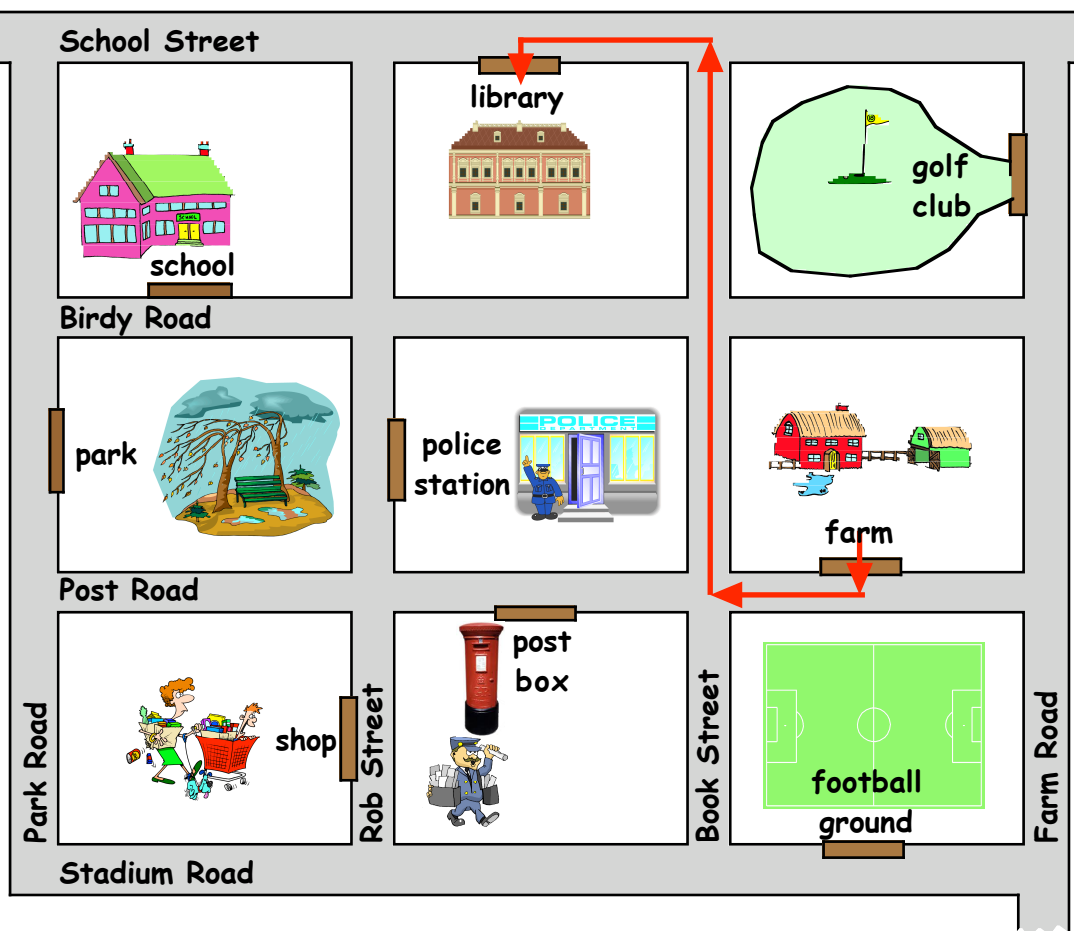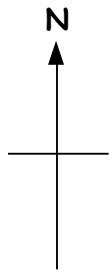
a Farmer Giles travels from his **farm** to the **library**. Copy and complete the sentence :–

- Come out of the farm.
- Turn **right** onto .... **Road.**
- Turn **1st** .... onto .... **Street.**
- Turn **2nd** .... and the library is on your ....

b Write down similar directions to get from the **school** to the **post box**.

c Write down the directions from the **police station** to the **football ground**.

d I leave the **shop** and turn left.
I take the 2nd on the right and walk along the road.
I then take the 2nd street on my left.

What will I then pass on my left side ?

5. In the diagram above the library is **North** of the police station.

a What is **North** of the park ?

b What is **South** of the farm ?

c What is **East** of the post box ?

d What is **West** of the library ?

e Describe what direction the police station is from the park ?

Mathematics Assessment (CfE) - Level 1

1. Draw the next **two** shapes in this pattern :-

    ....

2. Draw the block of circles missing from this pattern :-

    ....
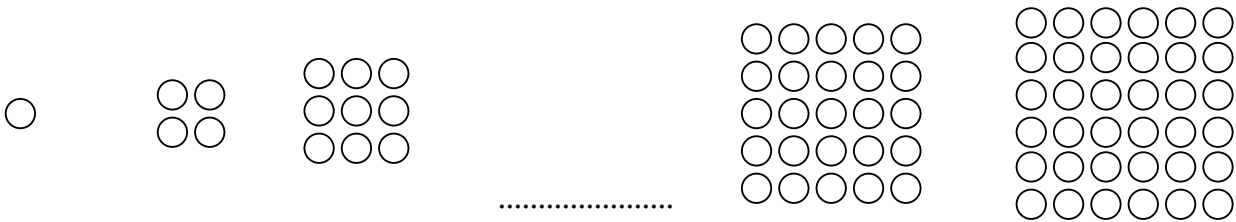
3. Write down the **next 2 numbers** in each pattern :-

    a   5, 6, 7, 8, ...   b   2, 4, 6, 8, ...

    c   29, 27, 25, 23, ...   d   60, 70, 80, 90, ...

4. The number pattern 4, 7, 10, 13, 16, ..., can be described as follows :-

    "start at 4 and add on 3 each time".

    Describe the following number patterns **in a similar way** :-

    a   5, 9, 13, 17, ...   b   19, 17, 15, 13, ...

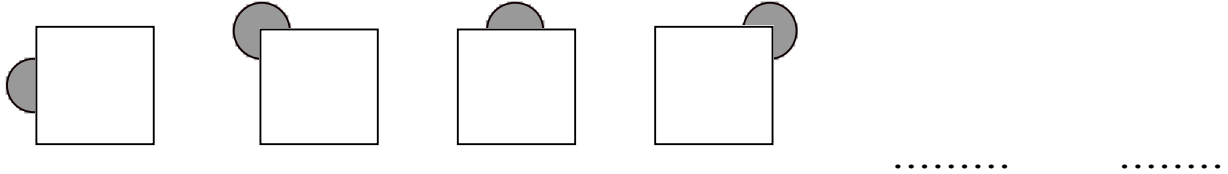5. Write down the **next 2 numbers** in each pattern :–

    a   1, 4, 7, 10, ...   b   2, 8, 14, 20, ...

    c   39, 50, 61, 72, ... d   200, 180, 160, 140, ...

6. **COPY** each number pattern and enter in **all the missing numbers** :–

    a   7, 11, ..., 19, 23, ... b   ...., 8, 13, 18, ..., 28

    c   37, 33, 29, ..., 21, ... d   818, ..., 616, 515, ..., 313.

7. What is the next number in this pattern 1, 3, 6, 10, 15, ... ?

Mathematics Assessment (CfE) - Level 1

(MTH 1 - 15a)

I can compare, describe and show number relationships, using appropriate vocabulary and the symbols for equals, not equal to, less than and greater than.

1. State which sign, (**+, –, × or ÷**), should go in each box to make the calculation correct.

    a 6 ☐ 7 = 13   **b** 12 ☐ 5 = 7   **c** 8 ☐ 5 = 40

    d 27 ☐ 9 = 3   **e** 20 ☐ 11 = 9   **f** 21 ☐ 5 = 105.

2. Here are 8 calculations.

    Match them up in pairs with the same answer using the equal (=) sign.

    9 x 2 = ...

    | 30 ÷ 2 |
    | 9 x 2 |
    | 6 x 4 |
    | 2 x 12 |
    | 21 ÷ 3 |
    | 14 + 4 |
    | 1 + 2 + 3 + 4 + 5 |
    | 15 – 8 |

3. In this question you are given two numbers or calculations.

    COPY each one and write **is equal to**,   **is smaller than** or **is greater than** :-

    a 10 15   **b** 27 23   **c** 101 110

    d 3 x 7 .... 5 x 4   **e** 20 ÷ 5 .... 24 ÷ 6   **f** 36 – 8 .... 38 – 6.

4. **COPY** each of these. Put in the symbol = (equals) or ≠ (not equal to) between each calculation :-

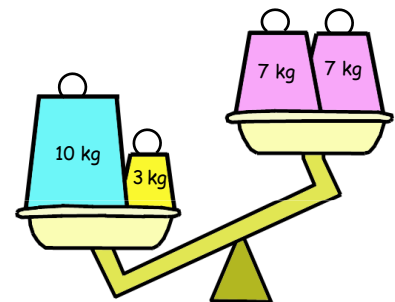   **a** 8 x 3 ..... 6 x 4   **b** 20 ÷ 4 ..... 30 ÷ 5   **c** $\frac{1}{2}$ of 24 ..... $\frac{1}{3}$ of 30.

5. Some kilogram weights were put on either side of a balance.

    Write down what you think is **wrong** with this picture.

6. You should know these symbols :-

    | (= is equal to)   (> is greater than)   (< is smaller than) |

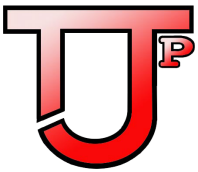   **COPY** these and write =, **>**, or **<** between each one to make the calculations correct :-

    a 23 32   **b** 11 10   **c** 9 x 7 ..... 7 x 9

    d $\frac{1}{2}$ of 100 ..... 7 x 7   **e** 14 x 3 ..... 13 x 4   **f** $\frac{1}{4}$ of 24 ..... 35 – 30.

Mathematics Assessment (CfE) – Level 1

(MTH 1 - 15b)

> When a picture or symbol is used to replace a number in a number statement, I can find its value using my knowledge of number facts and explain my thinking to others.

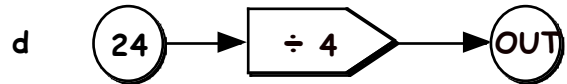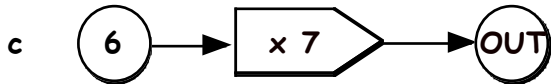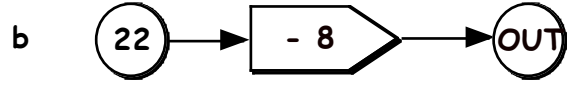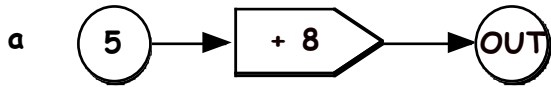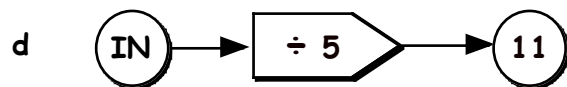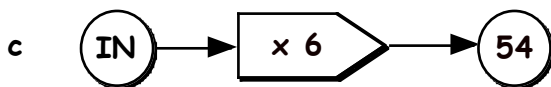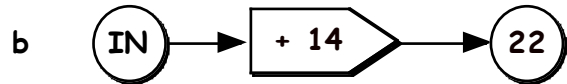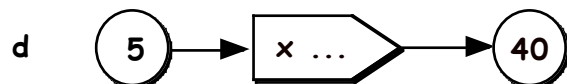1. What number should come **OUT** of each of these number machines ?

   a 5 → + 8 → OUT

   b 22 → - 8 → OUT

   c 6 → × 7 → OUT

   d 24 → ÷ 4 → OUT

   e 62 → - 8 → OUT

   f 120 → ÷ 10 → OUT
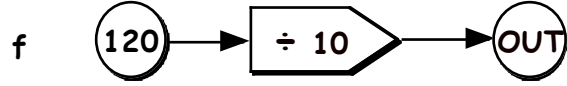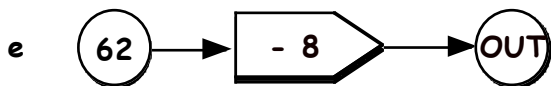
2. What number must have gone **IN** to each of these number machines ?

   a IN → - 5 → 7

   b IN → + 14 → 22

   c IN → × 6 → 54

   d IN → ÷ 5 → 11

3. Write down the numbers that are missing from each of these number machines :-

   a 9 → - … → 2

   b 15 → + … → 32

   c 48 → ÷ … → 6

   d 5 → × … → 40
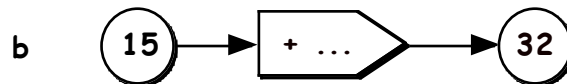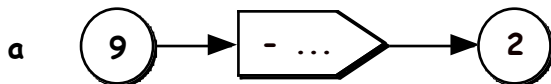
4. Write down what number the ✱ stands for in each of these number statements (equations) :-

   a $8 + ✱ = 12$

   b $10 - ✱ = 3$

   c $3 \times ✱ = 21$

   d $16 ÷ ✱ = 2$

   e $✱ - 8 = 11$

   f $150 ÷ ✱ = 15.$

5. What does each **symbol** stand for in these number statements :-

   a $23 - \square = 19$

   b $7 \times \bigcirc = 49$

   c $40 ÷ \stackrel{\star}{} = 8$

   d $59 + \lozenge = 79$

   e $\triangledown - 2 = 49$

   f $\frac{1}{2}$ of $\hexagon = 7.$

   g $20 + \text{◠} = 36$

   h $\pentagon - 5 = 95$

   i $\frac{1}{3}$ of $\text{◯} = 10.$

1. **a**   What is the day **just before** Monday ?

    b   What day is two days **before** Thursday ?

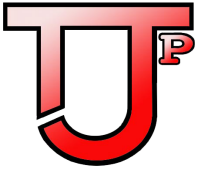   **c**   What day is three days **after** Tuesday ?

2. **a**   What is the month that comes **just after** May ?

    b   What is the month that comes **3 months after** June ?

    c   What is the month which comes **2 months before** February ?

3. How many **days** are there in :-

    a   May   **b**   November   **c**   a year ?

4. January is the **first** month of the year.

    What month of the year is :-

    a   April   **b**   October   **c**   August ?

5. Shown are some pictures. Choose which **season** they are most likely to be in.

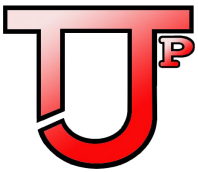   **a**   **b**   **c**
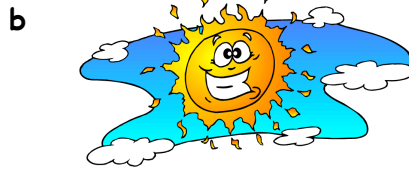
6. Ailsa passed her driving test on the 7th of June 2010.

    This is written as :-   **07 : 06 : 10**.

    Her brother passed his test on the 23rd of September 2007.

    Write the date he passed his test in the same way as Ailsa's.

7. Write these dates **using words** :-   **a**   31 : 12 : 09   **b**   01 : 01 : 10.

8. Shown is a calendar tab for March 2011.

    a   On what day of the week did the 15th March lie ?

    b   How many Fridays were there in March 2011 ?

    c   What date is the last Sunday in March ?

    d   On what day of the week did the **2nd** of **April** lie ?

March 2011						
Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Mathematics Assessment (CfE) - Level 1

(MNU 1 - 10c)

I have begun to develop a sense of how long tasks take by measuring the time taken to complete a range of activities using a variety of timers.

1. Look at the four times shown opposite.

   Match up the 4 times with the following 4 events.

   5 minutes   **2 hours**   **30 minutes**   **8 hours**

   a Eat your cereal in the morning.

   b Fly to America.

   c Listen to the news on television.

   d Go watch a football match.

2. **10 seconds**   **10 hours**   **10 minutes**   **10 days**

   Match up these 4 times with the following 4 events.

   a Drive to the local supermarket.

   b Comb my hair.

   c Sail on a cruise.

   d Sleep at night.

3. Write down any activity you can think of that would take about :-

   a 30 seconds

   b 30 minutes.

4. It takes a person about 15 minutes to **walk** a mile.

   About how long would it take to :-

   a **jog** a mile

   b **cycle** a mile

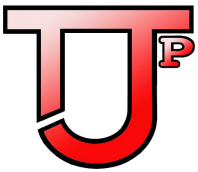   **c** **drive fast in a car** for a mile ?

*Give the answer **seconds**, **minutes**, **hours** or **days** to answer question 5.*

5. What **unit** of **time** would you use to measure how long it would take for :-

   a your teacher to run a marathon

   b a pupil to walk across the classroom

   c a ship to sail around the world

   d you to do twenty addition sums ?

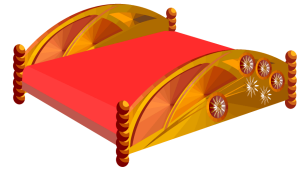# Mathematics Assessment (CfE) – Level 1

(MNU 1 - 11a)

I can estimate how long or heavy an object is, or what amount it holds, using everyday things as a guide, then measure or weigh it using appropriate instruments and units.

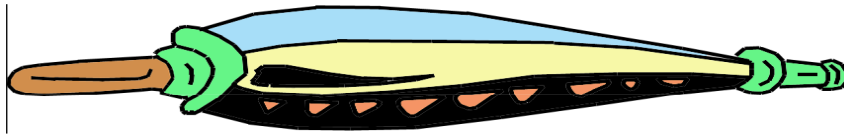1. What measuring **instrument** would you use to measure the length of :-

   a   a watch strap

   b   a bed ?

2. Measure and write down the length of this doll's umbrella, to the **nearest centimetre**.

3. Say whether you would use **millimetres**, **centimetres**, **metres** or **kilometres** to measure :-

   a   the distance from Glasgow to Edinburgh.

   b   the length of your classroom.

   c   the length of a pencil.

   d   the width of your fingernail.

4. Estimate which is **lighter** each time here :-

   a   an apple or a grape
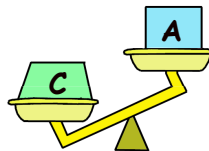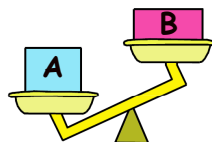
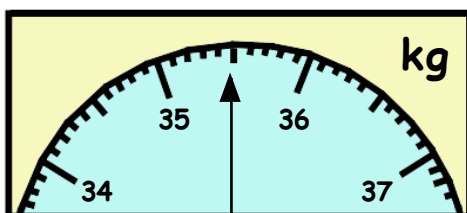   **b**   a tennis ball or a football

   c   a crow or a robin.

5. Which hat is the **heavier** - The Top Hat or the the Baseball Cap ?

6. Which of the 3 boxes **A**, **B** or **C** is the **heaviest** ?

7. Write down the weight shown on the scales.

8. Write these objects in order with the **shortest** length first :–

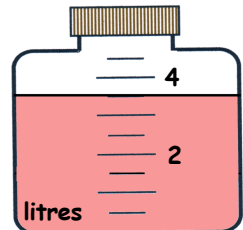   golf club,   clothes pole,   teaspoon,   paintbrush.

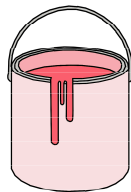9. Alison had a tickly cough. Her mum gave her some cough mixture.

   The label read - "Take *two* spoonfuls 3 times a day for 5 days".

   How many spoonfuls of mixture had Alison taken after the 5 days ?

10. How many litres of cherry-ade are there in this large bottle ?
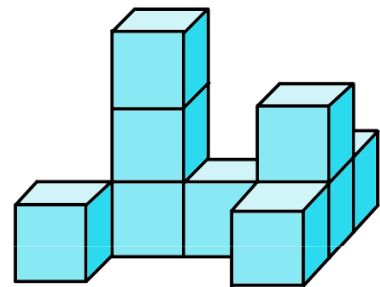
11. A painter opened a **3 litre** tin of paint.

    He poured the paint evenly into **half litre** pots.

    How many pots did he need to do this ?

12. Count the number of cubic centimetres in the shape.

13. Write these objects in order with the **largest** volume first :–

    tea-cup,   bucket,   spoon,   bath-tub,   flower vase.

14. Say whether you would use **grams** or **kilograms** to measure the weight of :–

    a   a bicycle   **b**   a banana.

15. Say whether you would use **litres** or **millilitres** to measure the volume of liquid in :-

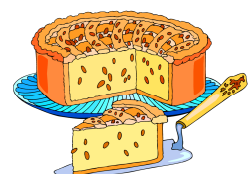   **a**   a bucket   **b**   a tablespoon.

16. Delia made two cakes.

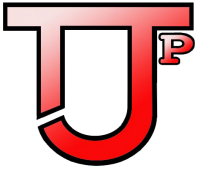   The cherry cake weighs **1200 grams** and the sultana cake weighs **800 grams**.

    cherry cake

    sultana cake

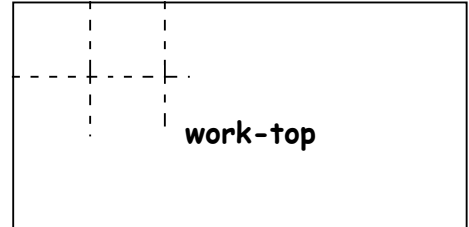   What is the **total** weight of both cakes in **kilograms** ?
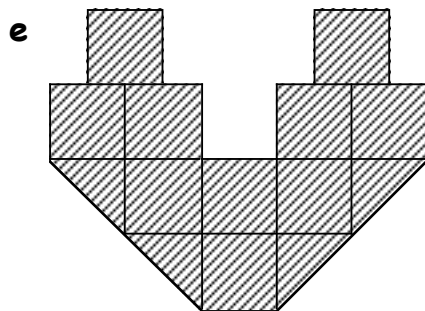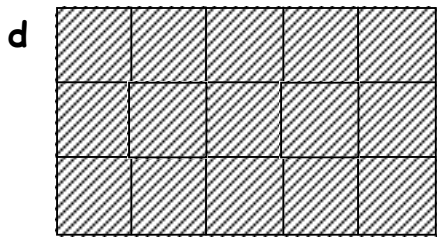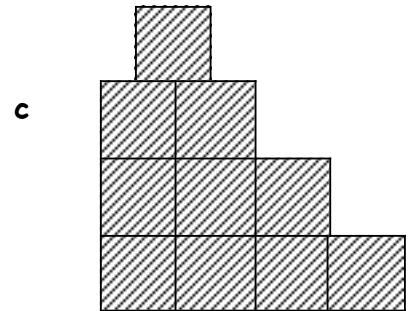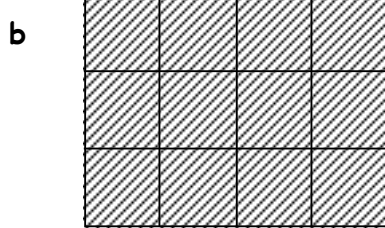
1. Which has the larger **area** :-

    a   a football pitch or a tennis court   **b**   a napkin or a tablecover ?

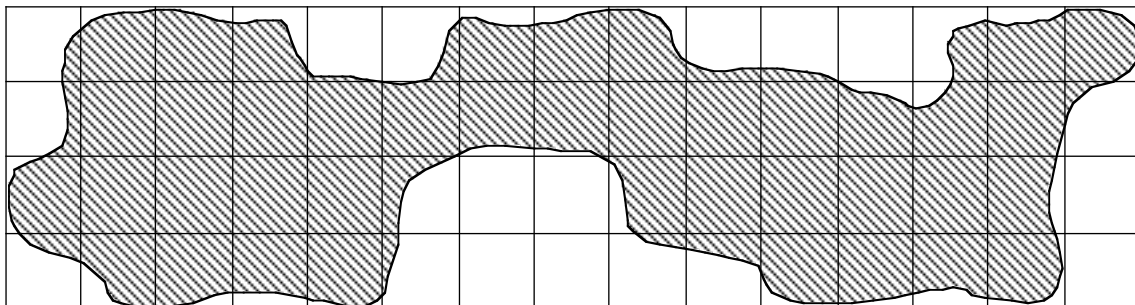**2.** **Estimate** how many of these tiles would be needed to cover this work-top.

tile

work-top

3. Write down the **shaded** area of these shapes in **cm^2** :-

    a   **b**   **c**

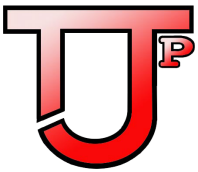   **d**   **e**   **f**
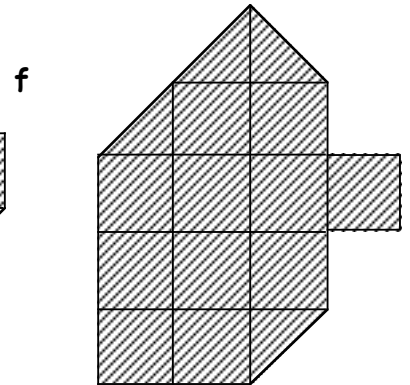
4. **Estimate** the area of this shape by counting the centimetre squares. Use these rules :-

If **more** than $\frac{1}{2}$ a box is covered

—› **count it** as 1 cm^2.

If **less** than $\frac{1}{2}$ a box is covered

—› **do not count it** at all.

Mathematics Assessment (CfE) – Level 1

(MTH 1 - 12a)

I have discussed the important part that numbers play in the world and explored a variety of systems that have been used by civilisations throughout history to record numbers.

This Outcome will be assessed dependent on the topic or topics covered by a particular class.

a   Discuss the language in other countries for numbers - un, deux, trois, ...

b   Look at various other ways of counting objects - tally marks and use the internet to study various early counting systems

	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Babylonian														
Roman		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
Mayan														

c   Simple Binary system using only 0's and 1's to build up numbers

0   1   10   11   100   101   110   111   1000   1001   1010   1011   1100   1101 .....
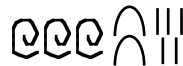
d   Discuss place value - what 3 6 5 really means   (3 x 100) + (6 x 10) + 5 etc.

e   The abacus

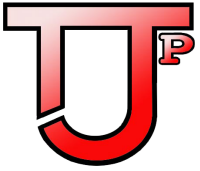**f**   The early Egyptian system 1 - | 10 - ∩   100 - ℘

This means that 325 in Egyptian is   ℘℘℘∩|||

g   A mathematician or arithmetician might be chosen, Pythagoras, John Napier (Scottish) etc and children could research the work done by him/her using the internet.
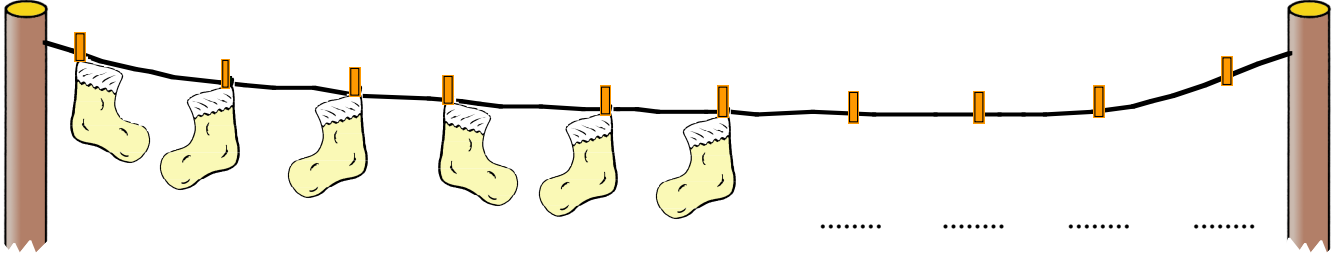
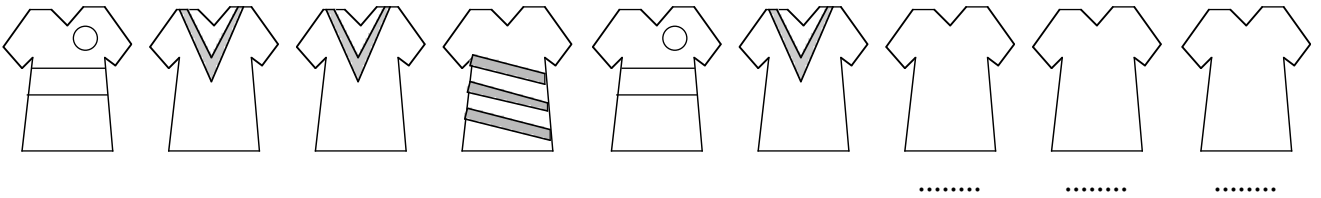# Mathematics Assessment (CfE) – Level 1

(MTH 1 - 13a)

I can continue and devise more involved repeating patterns or designs, using a variety of media.
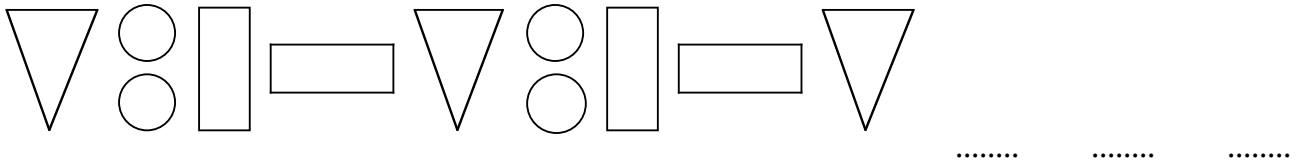
This is a WRITE ON assessment

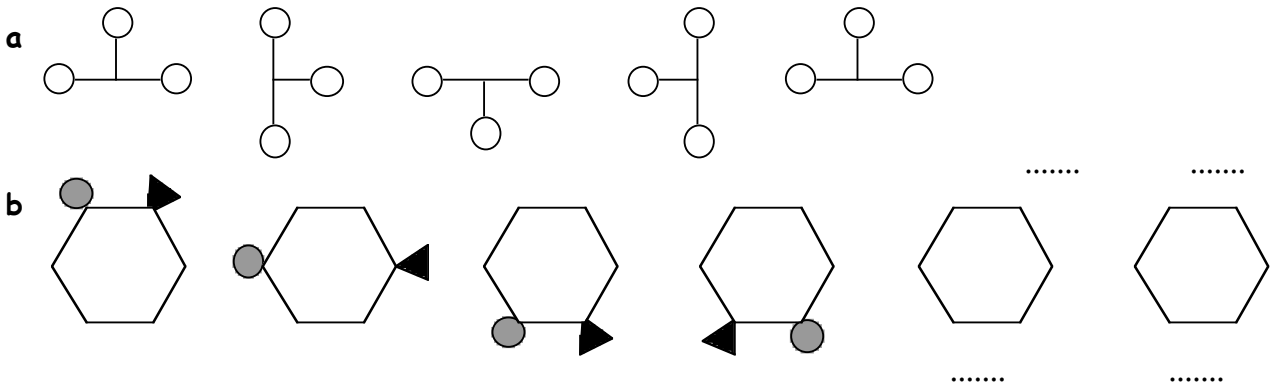1. Draw the next **four** socks hanging on the wash-line to continue the pattern.

....

2. Fill in the design on the **last three** football shirts to continue the pattern.

....

3. Draw the next **three** shapes in this pattern :-

....

4. Continue each of these patterns by drawing **two** more shapes each time :-

   a

   ....

   b

   ....

5. Continue the pattern by shading in **the last** shape.

   ....
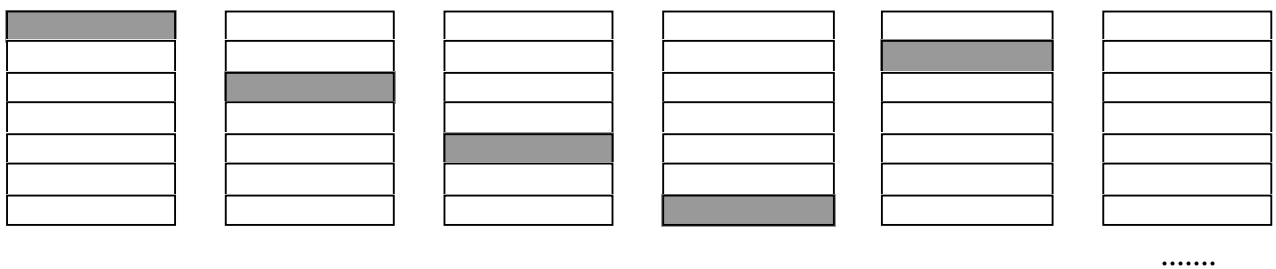
6. Fill in the next **two letters** in this patterns :-   A, C, E, G, I, ..., ...,
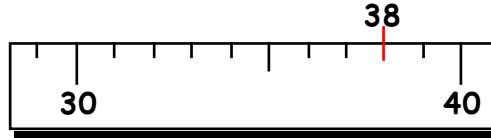
Mathematics Assessment (CfE) - Level 1

(MNU 1 - 01a)

I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate.

1. Look at this part of a number line.

Use it to **estimate** what 38 rounds to, **to the nearest 10**.

38

30   **40**

for Q 1-8

2. **Round** each of these numbers **to the nearest 10** :-

    a 52   **b** 89   **c** 356   **d** 725.

3. **Copy** and **complete** the following estimation to find the answers to **137 + 329** :-

    137 + 329 is about the same as *140 +* .... which is about ......

4. **Estimate** the answers to the following in the same way as in question **3** :-

    a 28 + 33   **b** 149 + 313   **c** 82 – 48   **d** 791 – 218.

5.

Vampire 16

Jane had 461 stickers in her "Monsters" sticker collection.

She gave away 197 to her friend Gemma.

Estimate to the nearest 10 how many stickers she had left.

6. Marvin and Elsie completed a sponsored jog for charity.

Marvin collected £318 and Elsie collected £273.

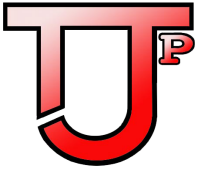**Estimate to the nearest £10** how much they collected altogether.

7. Alice, Nicola and Lynne won **£229 each** on the Lottery.

By rounding, **estimate to the nearest £10** how much this was **altogether**.

8. A fence was **525 cm** long.
During a winter storm, a section
197 cm long, was blown down.

Estimate what length remained standing.
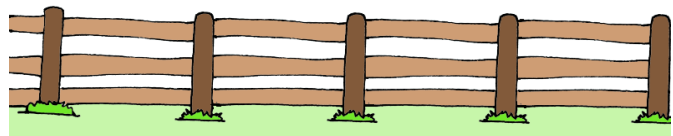
Your teacher may wish to give you out a calculator on completion of the test to check answers.

Mathematics Assessment (CfE) - Level 1

(MNU 1 - 02a)

I have investigated how whole numbers are constructed, can understand the importance of zero within the system and use my knowledge to explain the link between a digit, its place and its value.

1. Write these numbers using **digits** :-

   a thirty two

   b one hundred and seventy five

   c two thousand and three

   d nine thousand and sixty.

2. Write these numbers in **words** :-

   a 73   **b** 629   **c** 3078   **d** 6040.

3. Write the number that comes :-

   a just after 129   **b** just before 700   **c** ten after 840

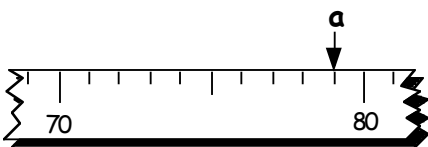   **d** 10 before 1000   **e** 100 after 7200   **f** 1000 before 8700.

4. What does the digit **8** stand for in the number :-

   a 287   **b** 1817   **c** **8**765 ?

5. Re-write these numbers in order. Start with the smallest one :-   239, 198, 302, 551, 189, 320.

6. Put these numbers in order, starting with the largest. :- 4892, 4971, 5002, 5020, 4992.
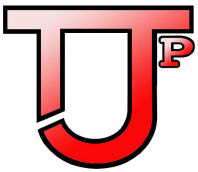
7. What numbers do the arrows point to ?

8.
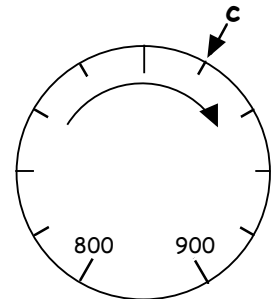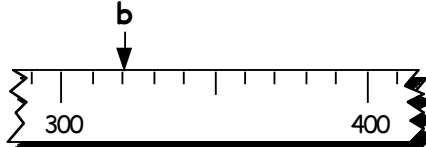
AB1036	**1511**
AB1036	**1512**
AB1036	**1513**
AB1036	**1514**
AB1036	**1515**

   Raffle tickets are sold in strips of 5.

   Ben bought the strip with the numbers 1511, 1512, 1513, 1514 and 1515.

   Lucy bought the strip **just before** the one Ben bought.

   What were the five numbers on Lucy's strip of tickets ?

9. This diagram shows the position of 3 runners in a 500 metre race.
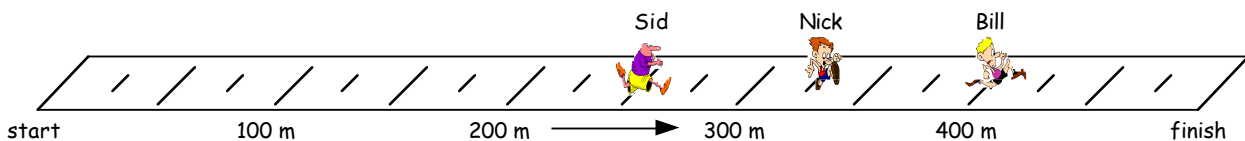
   a How far has Bill run ?   **b** How far has Sid Run ?

   c How far is Nick from the finish ?   **d** How far is Nick **ahead** of Sid ?

Mathematics Assessment (CfE) – Level 1

(MNU 1 - 03a)

I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed.

1. Set down these additions and subtractions and do the calculations :-

   a   44
         + 9

   b   380
         + 60

   c   70
          450
         + 80

   d   85 + 16

   e   390 + 40

   f   420 + 60 + 90

   g   76
         – 8

   h   640
         – 70

2. Jane has 67p. She spends 8p buying a sweetie.

   Her mum then gives her another 6p.

   How much does Jane then have ?
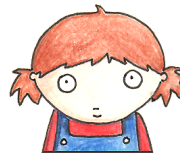
3. Derek is a milk boy and earns £23 per week.

   Simon is a paper boy and gets £3 **less** than Derek.

   Laura has a delivery job and gets paid £7 **more** than Derek.

   a   What does Simon earn ?

   b   What does Laura earn ?

   c   How much **less** than Laura does Simon earn ?

4. Find the missing number in each of the following.   The missing number is shown as a ◾ .
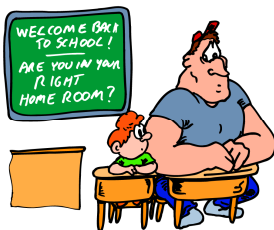
   a   4◾
         + 7
         5 3

   b   5 7 0
         + ◾ 0
         6 4 0

   c   9 ◾
         – 8
         8 4

   d   5 2 0
         – ◾ 0
         4 3 0

5. There were **300** adults at a parents' open night.

   170 of them were **women**.

   How many of them were **men** ?

6. In this puzzle, the number in each rectangle is found by adding the two numbers in the stars either side of the rectangle.

   Copy and complete each puzzle.

   a

   120
   410
   290   180

   b

   90
   40   20
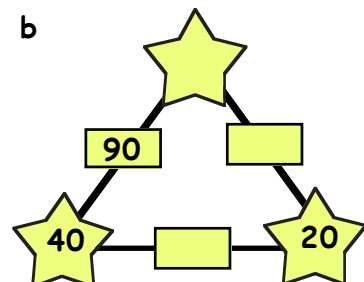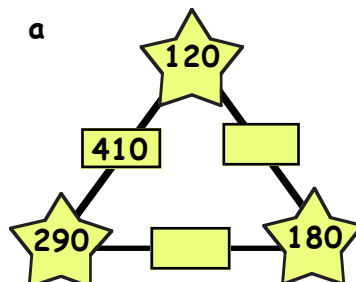
7. Set down these multiplications and divisions and do the calculations :-

a   31
    × 7

b   53
    × 8

c   410
    × 6

d   83 × 9

e   340 × 5

f   4)84
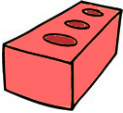
g   3)72
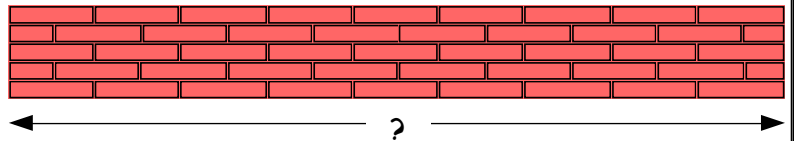
h   5)530

i   84 ÷ 7

j   8 into 648

k $\frac{204}{3}$

l   102 divided by 6.

8. 7 playing cards weigh 98 grams.

   Find the weight of **one** card.
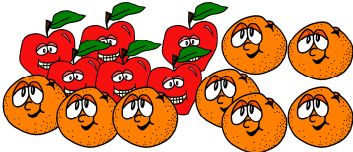
9. A brick is 23 cm long.

   Work out the length of a
   wall which is 9 bricks long.

   ?

10. A shopkeeper bought in a batch of 8 digital
    cameras for £600.

    How much is each camera worth ?

11. An apple costs 23p and an orange costs 34p.

    What is the total cost of 6 apples and 8 oranges ?

12. Do the following - just write down the answer :-

    a   35 × 10

    b   260 × 10

    c   920 ÷ 10

    d   6500 ÷ 10.

13. Paper napkins are sold in packs of 150.

   A restaurant buys 10 packs. How many napkins will it have ?
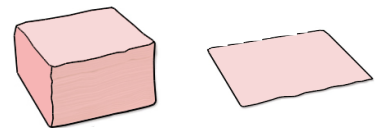
14. There are 10 millimetres in 1 centimetre.

    a   How many millimetres are there in 53 centimetres ?

    b   How many centimetres are the same as 1500 millimetres ?

15. George and Henry check how much money they have in their wallets.
    George has £230 and Henry only has £90.

    a   How much do they have **altogether** ?

    b   How much **more** does George have than Henry ?
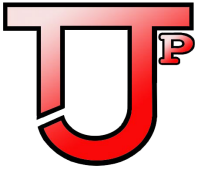
Mathematics Assessment (CfE) - Level 1

(MNU 1 - 07a)

Having explored fractions by taking part in practical activities,
I can show my understanding of:
- how a single item can be shared equally
- the notation and vocabulary associated with fractions
- where simple fractions lie on the number line.

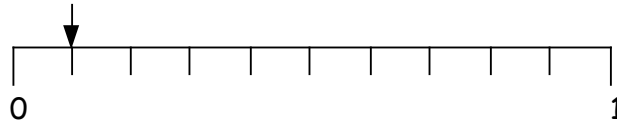1. What **fraction** of this pizza has been eaten ?
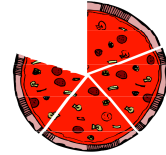
2. Draw a **square** to show this chocolate brownie.

   Show how to cut it up so that Sohail, Lucy, Billy
   and Eve get an **equal** share of the brownie.

3. What fraction is represented
   on this number line ?

   0   1

4. Bill is going to saw equal pieces off this copper pipe. He has marked where he is going to cut it.

   What **fraction** of the pipe
   is each piece ?

5. A lottery prize is shared equally between 8 members of a family.

   What **fraction** of the prize money will each person receive ?

6. Some boys shared a melon equally amongst themselves.
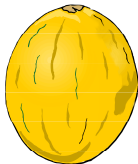
   This picture shows Tommy's slice.
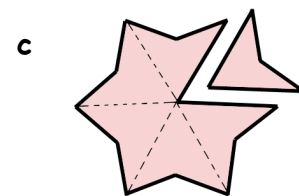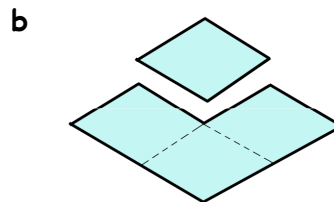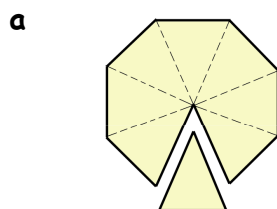
   How many boys must there have been altogether ?

   Tommy
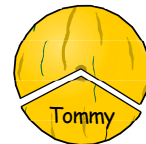
7. Old Mother Hubbarb bought some unusually shaped cake tins to make some cakes.

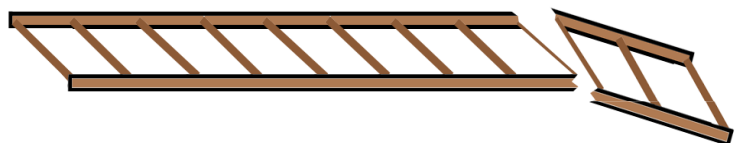   Each cake had a slice removed for her to taste.

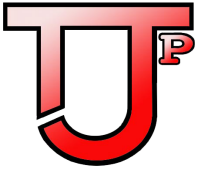   What **fraction** of each cake has been removed ?

   a   b   c

8. Mr Johnstone's ladder slipped and a bit broke off the end.

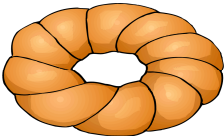   **Estimate** what **fraction** of
   the ladder had broken off.

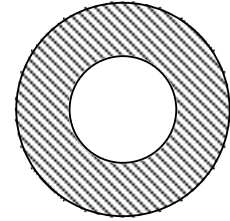# Mathematics Assessment (CfE) - Level 1

(MNU 1 - 07b)

Through exploring how groups of items can be shared equally, I can find a fraction of an amount by applying my knowledge of division.
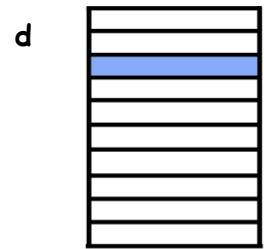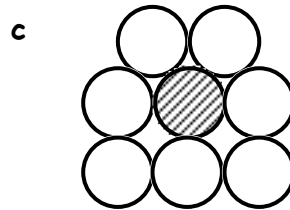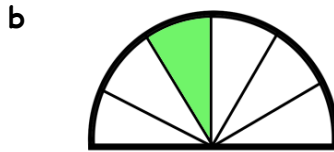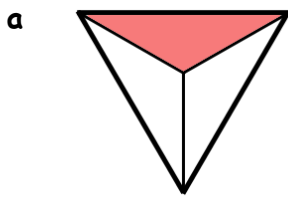
1. **a** Make a sketch of this rectangle and show how to split it into $\frac{1}{3}$'s.

    b Sketch this bread ring as shown and draw in lines to cut the ring into **quarters**. ⟶

2. What fraction of each shape is the **coloured** or **shaded** part ?

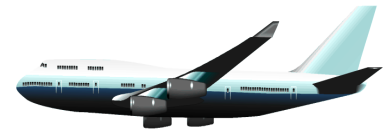   **a**   **b**   **c**   **d**

3. What is :-

    a $\frac{1}{2}$ of 18   **b** $\frac{1}{4}$ of 36 sweets   **c** $\frac{1}{8}$ of £480   **d** $\frac{1}{10}$ of 300 g ?

4. A plane from London to New York had 450 passengers on board. $\frac{1}{5}$ of them had never flown before.

    How many passengers had never flown before ?

5. Private Davies made 39 pancakes for his platoon. He covered $\frac{1}{3}$ of them with syrup.

    a How many pancakes had syrup over them ?

    b How many pancakes **did not** have syrup on them ?

6. When George and Mavis got married there were 120 guests at their wedding. $\frac{1}{6}$ of the guests were **friends**. The rest were **family**.
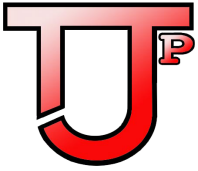
    a How many of the guests were **friends** ?

    b How many of them were **family** ?

7. **a** Find $\frac{1}{4}$ of £20.

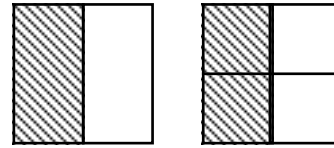   **b** Use this answer to calculate $\frac{3}{4}$ of £20.

# Mathematics Assessment (CfE) – Level 1
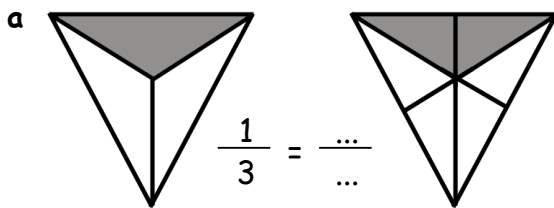
(MTH 1 - 07c)

Through taking part in practical activities including use of pictorial representations, I can demonstrate my understanding of simple fractions which are equivalent.

1. This diagram shows 2 **equivalent** fractions.

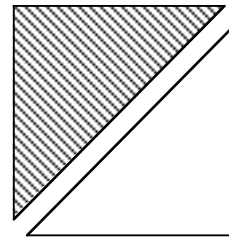   **Copy** and **complete** - $\dfrac{1}{2}$ is the same as $\dfrac{2}{...}$.

2. For each diagram, write down the **two** fractions that are shown to be **equivalent** (the same).

   a $\quad \dfrac{1}{3} = \dfrac{...}{...}$

   b

   c

   d
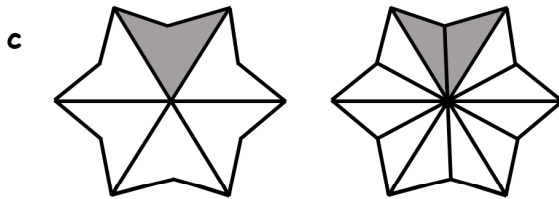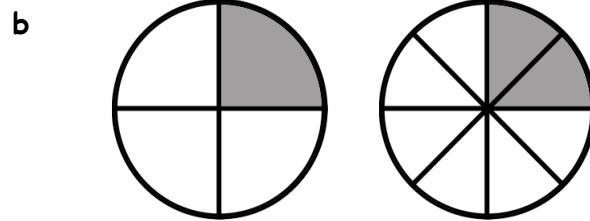
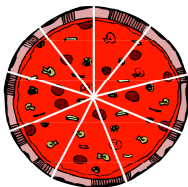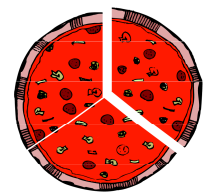3. This square has been cut into two parts and shows each part is $\dfrac{1}{2}$.

   Draw the square again and show how to cut it to give the **equivalent** fraction $\dfrac{2}{4}$.

4. Davie's mum was going to cut a big pizza like this and give Davie a slice.

   a What **fraction** of the pizza was Davie going to get ?

   b Davie's mum really cut the pizza into 9 slices as shown below.
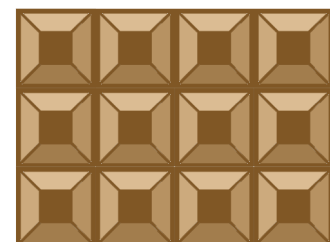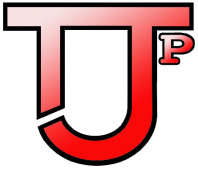
   How many **slices** must she give Davie so he ends up with the same amount of pizza as he was going to get ?

5. Jenna, Laura, Sandie and Nicki want to share this bar of chocolate among themselves **equally**.

   a What **fraction** will each girl receive ?

   b How many small chocolate squares will each girl get ?

1. **COPY** and complete :-

   a   £0·86
         + £0·47

   b   £5·13
         - £2·51

   c   £12·35
         - £8·62

   d   £4·00
         - £0·78

2. Jerry paid £1·50 for a burger and 85p for a cola.

   a   How much did the burger and the cola cost **altogether** ?
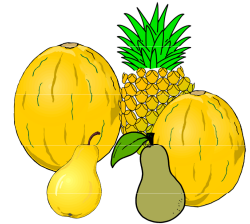
   b   What change did Jerry get from £3 ?

3. Mary bought a pair of fur slippers for £7·25 in *Shoe Store* but shortly after noticed that she could have bought them in *Slipper Palace* for £2·99 less.

   How much were the slippers in *Slipper Palace* ?

4. **COPY** and complete this bill working out the total cost.

2 melons at 80p each	=	£
1 pineapple at £1·48	=	£
2 pears at 37p each	=	£
TOTAL	=	£

5. Emma's mum gave her a £10 note to dress up for Halloween.

   She bought a witch's hat for £3·99, a face mask for £2·50 and a pumpkin for £1·95.

   How much money had Emma left ?

6. Brian set off for the football match with **four £2 coins** and a **50p** coin in his pocket.

   At the ground he paid the £4 entry fee, bought a match programme for £2·75 and hot curry pie for £1·46.
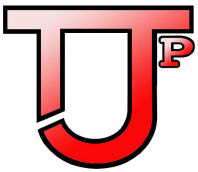
   How much had he left ?

7. During a sale, a shirt and tie set was reduced from £19·75 to £15·50.

   In the same sale, a jacket was reduced from £20 to £15·50.

   Which of the items had been reduced by the **most** ?

Mathematics Assessment (CfE) – Level 1

(MNU 1 - 09b)

I have investigated how different combinations of coins and notes can be used to pay for goods or be given in change.

1. How many :-

   a [one penny coin] are there in [50p] [20p] [2p] ?

   b [5p coin] are there in [50p] [20p] [5p] ?

   c [10p coin] are there in [£1] [£1] [£1] [£1] [20p] [10p] ?

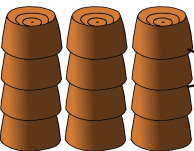   d [50p coin] are there in [Ten Pounds note] [£1] ?

2. How many **£1 coins** will you get for :-   a   200p   b   800p ?

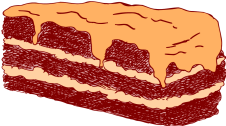3. How many **pence** are there in £2·95 ?

4. List the **coins** you might use to pay for each item, exactly :-

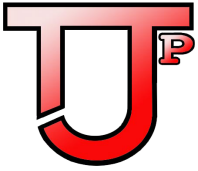   a   15p   b   43p   c   79p   d   £1·35

5. Gordon had **two 50p** coins.

   He spent 58p on a slice of chocolate cake.

   What coins should he expect in his change ?

6. Sally's dad gave her **two £5** notes.

   She spent £6·95 on a calculator, 31p on a pencil and 19p on a sharpener.

   a   Calculate how much money she had left.

   b   Write down the coins which could be used to make up this change.

Mathematics Assessment (CfE) - Level 1
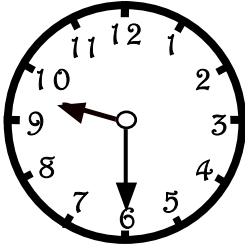
(MNU 1 - 10a)

I can tell the time using 12 hour clocks, realising there is a link with 24 hour notation, explain how it impacts on my daily routine and ensure that I am organised and ready for events throughout my day.

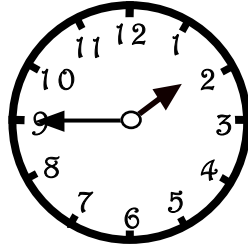1. The time shown on this watch face can be stated in **2 ways** :–

   12.40 or twenty to one

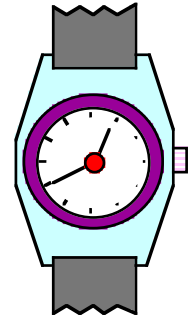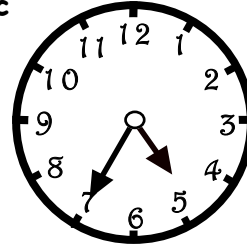   Write the times on these clock faces in **2 ways** :–
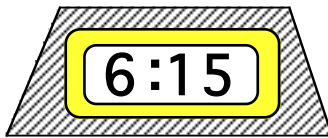
   a   b   c

2. Write these digital clock times using **WORDS** :–

   a   **6:15**   b   **9:50**

3. **COPY** this digital clock face and fill in the time **twenty to four**.

   :

4. Write each of these times in 12 hour form, **using am or pm** :–

   a   b   c   **7:35**
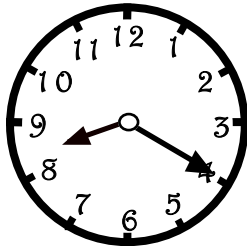
   having supper

   ready to leave for school   just home from school
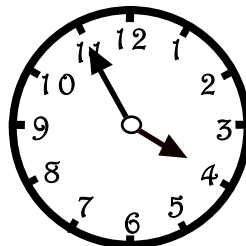
5. Write each time in **WORDS**.

   Use "**in the morning**", "**in the afternoon**" or "**at night**".

   a   b   c   **6:05**

                                          p m
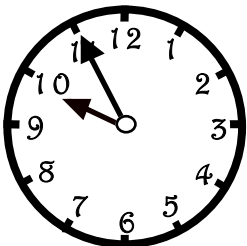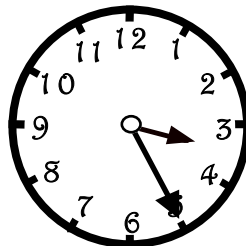
   p m   a m

6. This is part of Channel 8's T.V. programmes for Saturday.

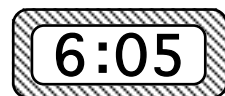Can you see that **Racing from Ayr** is on at

twenty five past two in the afternoon?

a Write out the times of the following programmes fully in the same way :–

    (i) Count–Up   **(ii)** Teatime News

b What programme starts on Channel 8 at :-

    (i) 10 past 2   **(ii)** quarter to 6 ?

Channel 8

2:10	**Bugs Rabbit (cartoon)**
2:25	**Racing from Ayr**
2:50	**Count-Up (quiz show)**
3:20	**Catlady Returns (film)**
4:55	**Sports Results**
5:05	**Teatime News**
5:25	**Scottish News**
5:45	**You've Been Caught**

7. Shown is part of the Glasgow - Stranraer train timetable.

Glasgow	→	Troon	→	Ayr	→	Girvan	→	Stranraer
11·45 am		12·15 pm		.....		1·10 pm		1·42 pm

a At what time in the morning did the train leave Glasgow ? (answer in **WORDS**)
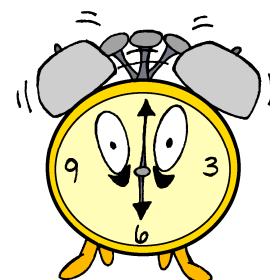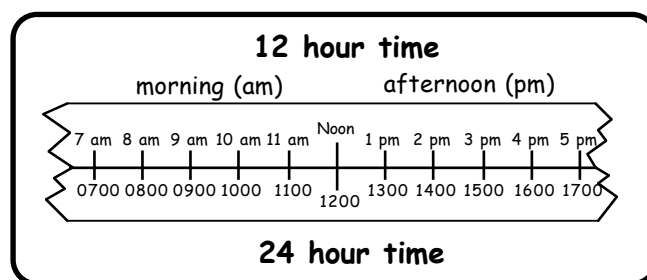
b The train arrived in Ayr at **twenty five past twelve**.
Write this time **using am/pm**.

c Write out in **words** when the train reached Girvan.

8. This time line shows both **12 hour** and **24 hour** times.

Can you see that **2 pm** in 12 hour time becomes **1400** hours in 24 hour time ?

12 hour time

morning (am)   afternoon (pm)

7 am	8 am	9 am	10 am	11 am	Noon	1 pm	2 pm	3 pm	4 pm	5 pm
0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700

24 hour time

a Change these 12 hour times into **24 hour times** :-

    (i) 4 am   **(ii)** 9 pm.

b Change these 24 hour times into **12 hour am/pm times** :-

    (i) 0200   **(ii)** 2300.