**Name_____ Date_____**

## satspapers.org
## 2012 Year 4 Optional SATs Test

## Mathematics – mark scheme

## Paper A for assessing at levels 2A 3C 3B
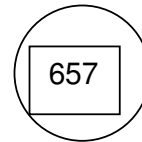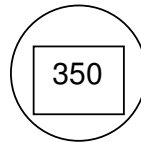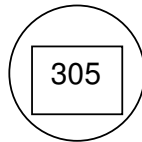45 minutes

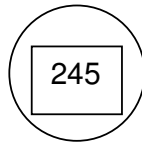1.  **Write the numbers in order in the circles.**

**134**              **657**              **305**              **245**              **350**



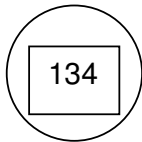**Smallest**                                                                                      **Largest**

**1 mark**

2.  **Look at each number sentence.**
    **Put a tick (✓ ) if it is correct.**
    **Put a cross (x ) if it is not correct.**

## 7 x 2 = 7 + 7                    ✓
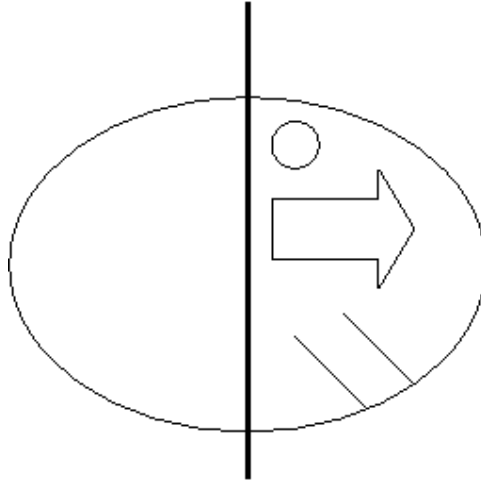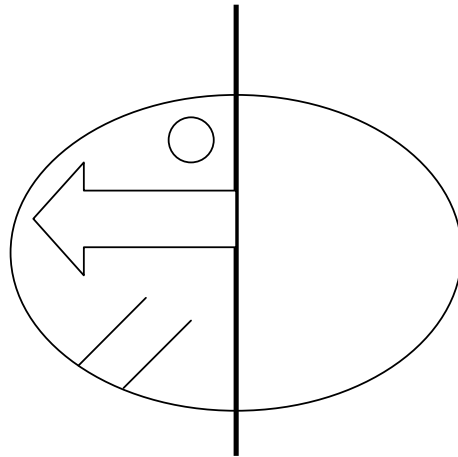
## 4 x 10 =  4 + 4 + 4              x

## 3 x 4 = 4 + 4 + 4               ✓

**1 mark**

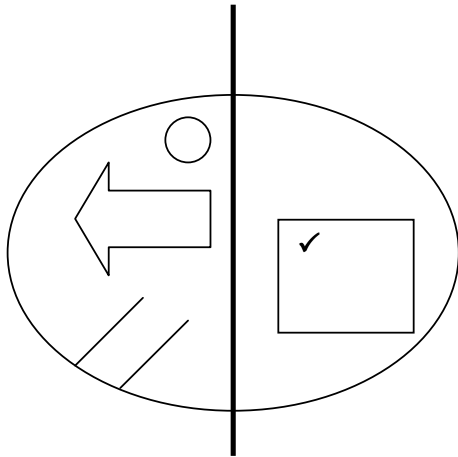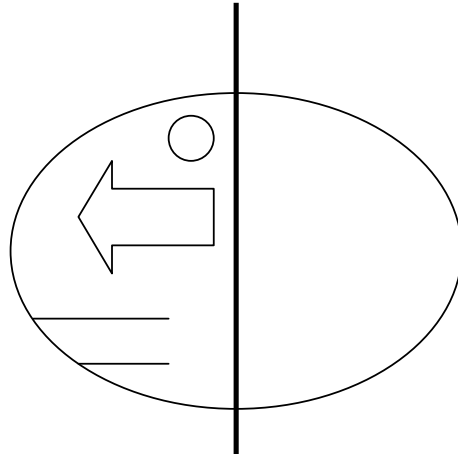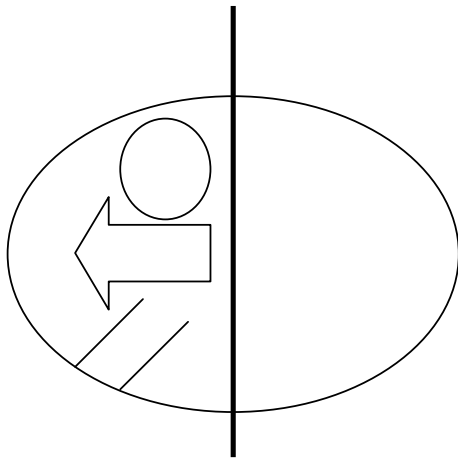**3.** **Here is half of a symmetrical picture.**



**Which of these is the reflection of the picture?**
**Put a tick (✓) beside it.**



**1 mark**

**4. Write in the missing number.**



723

+ 100

823

+ 100

923

+ 100

1023

<div align="right">
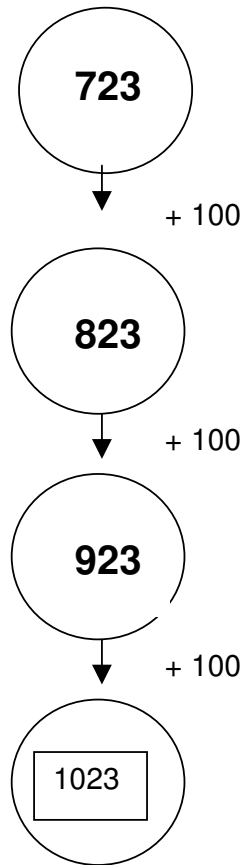
**1 mark**

</div>

**5. How much does the parcel weigh?**
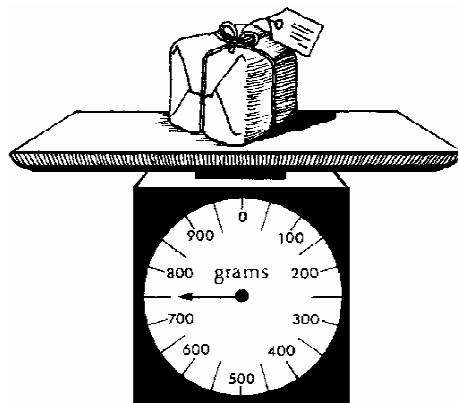


| 750 |
| --- |
| g |

<div align="right">

**1 mark**

</div>

**6. Calculate 148 + 38**

186

**7. Write each letter in the correct place on the diagram.**
   **One has been done for you.**

V     B     E     S

|  | **No** curved lines | **Curved lines** |
|---|---|---|
| **No** straight lines |  | S |
| **Straight lines** | V   E | B |

**1 mark for 2 letters correct, 2 marks for all correct**

**8. Peter drew a number line to find the answer to 54 +25**



+20          + 5

54                    74          79
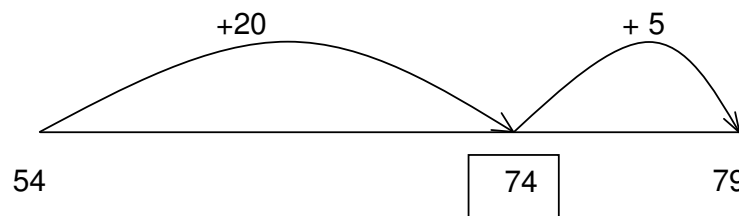
**9.** **Jasmine has £8.50**
**She wants to buy a game which costs £11.70**
**How much _more_ does she need to save?**

£3.20

**10. Here is a centimetre grid.**

**Draw a rectangle whose _longer_ sides are 7cm.**

Any rectangle drawn on the grid whose longer sides are 7cm,
Accept slight inaccuracies in drawing, provided the intention is
clear.
.
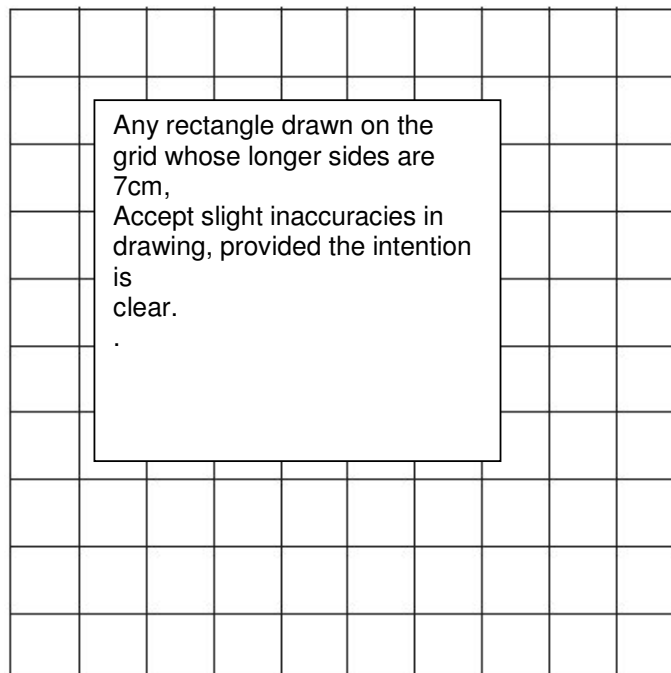
**11. Evie collects 4 toy animals each month for a year.**

**How many animals does she collect in a year?**

48

**12. This graph shows the number of minibeasts found in a garden.**



**How many more woodlice than ladybirds were found?**

5

**Which two types of minibeast were there more than 8 of?**

**Snails** and **woodlice**

13. Here is a multiplication.

**7 x 10 = 70**

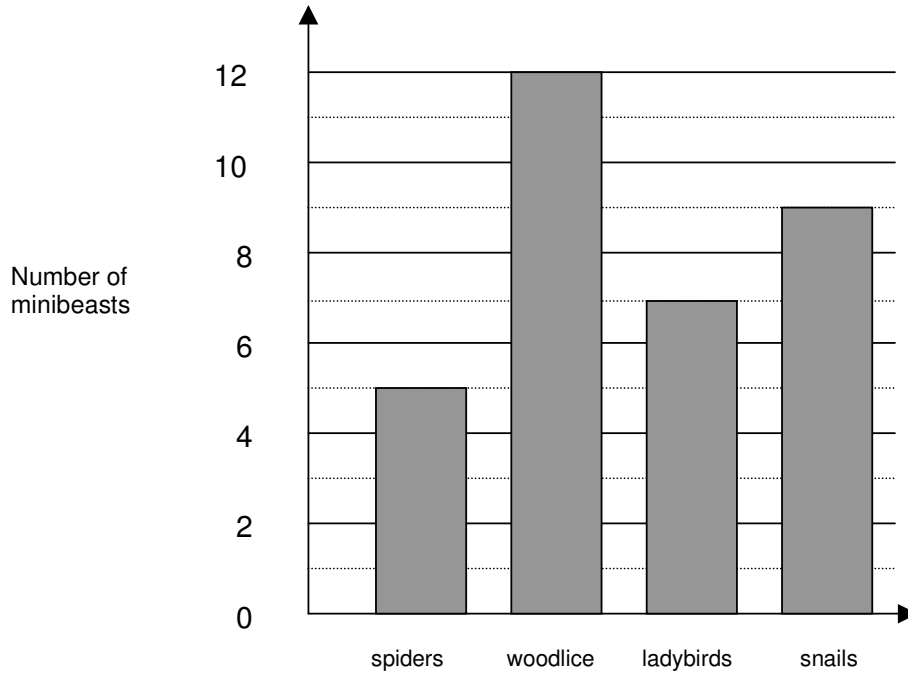**Which <u>division</u> uses the <u>same</u> <u>three numbers</u>?**

| |
|---|
| 70 ÷ 10 = 7 |
| OR |
| 70 ÷ 7 = 10 |
| OR |
| 7 = 70 ÷ 10 |
| OR |
| 10 = 70 ÷ 7 |

**1 mark**

14. Anna has a rod 17 cubes long.



**She breaks it into two pieces.**
**One piece is 1 cube longer than the other.**
**How many cubes are in each piece?**

| 9 | **and** | 8 |
|---|---|---|

**accept reverse order**

**1 mark**

15. Two of these sentences could be true.

**Tick (✓) the two sentences that could be true.**

**Jack's pencil is 10 centimetres long.**  ✓

**Harry is 10 metres tall.**  x

**Bert's glass holds 10 litres of milk.**  x

**Martha's younger sister weighs 10 kilograms.**  ✓

**1 mark**

**16. Draw another line 4cm longer than this line.**
**Use a ruler.**

**Line drawn correctly within 3 mm tolerance**

**1 mark**

**17. Calculate 133 – 87**

| 46 |
|----|

**1 mark**

**18. Here are two signs.**

| < |     | > |

**Use the signs to make these correct.**

62 | > | 37

16 | < | 61

1 | < | 45

**1 mark**

**19. Add together 456 and 368**

| 824 |
|-----|

**1 mark**

**20.** **These clocks show the start and finish times of a TV programme.**
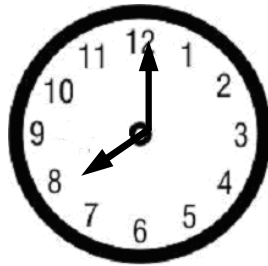


| start | finish |
|-------|--------|

For how many minutes does the programme last?

| 45 | minutes |
|----|---------|

**1 mark**

**21.** **Draw an arrow ( ↓) on the line to show** $2\frac{3}{4}$

| An arrow drawn on the number line as shown: <br> Accept any other clear way of indicating 2 3/4 <br> on the number line <br> as long as the intention is clear. |  |
|---|---|

**1 mark**

**22.** **A packet of sweets costs 45p. How much do six packets cost?**

Show how you worked it out.

Award TWO marks for the correct answer of £2.70 Up to 2
Accept £2.70p OR £2 70
If the answer is incorrect, award ONE mark for evidence of appropriate
working, eg
45 × 6 = wrong answer
OR
40 × 6 = 240
5 × 6 = 30
240 + 30 = wrong answer
OR
award ONE mark for £270 OR £270p OR £27.0 as evidence of appropriate working.
An answer must be given for the award of ONE mark.

£ 2.70

**2marks**

**23. The arrow is pointing south-east.**

North

North-east

North-west

West

East

South-east

South-west

South
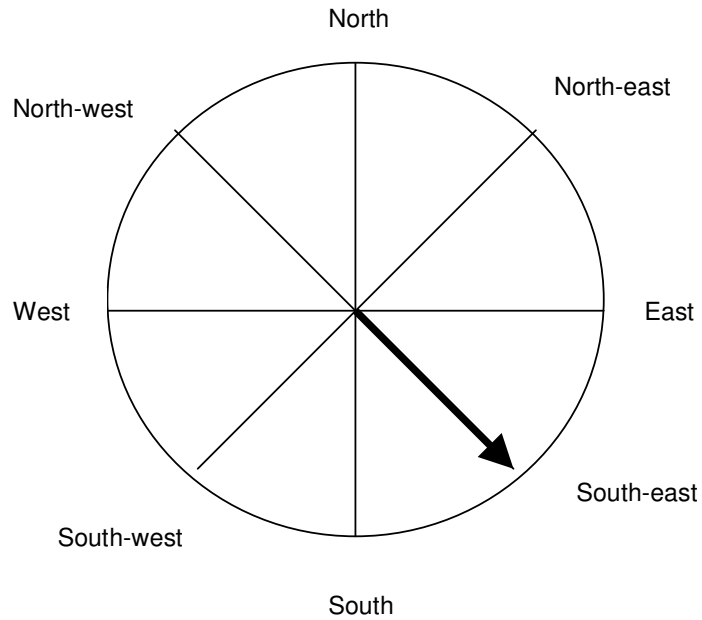
**The arrow is then moved a quarter turn <u>anti-clockwise</u>.**

**In which direction is the arrow pointing after it is moved?**

NE or north east

**1 mark**

Accept an unambiguous indication on the spinner.

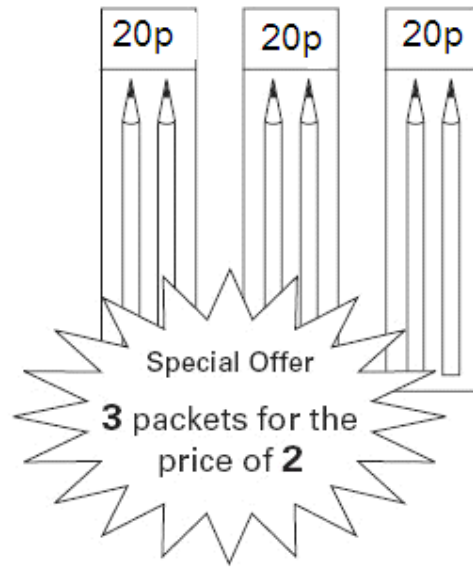**24. Circle the two fractions which are greater than** $\dfrac{1}{2}$

$\dfrac{5}{7}$    $\dfrac{2}{10}$    $\dfrac{1}{4}$    $\dfrac{8}{10}$

**1 mark**

**25.  A shop has these special offers.**



**Alesha wants to buy 6 pencils.**

**Which is the cheaper offer?**

**Tick ( ✓) one box.**

**Half price**  [ ✓ ]                    **3 for 2**  [   ]

**Explain how you know.**

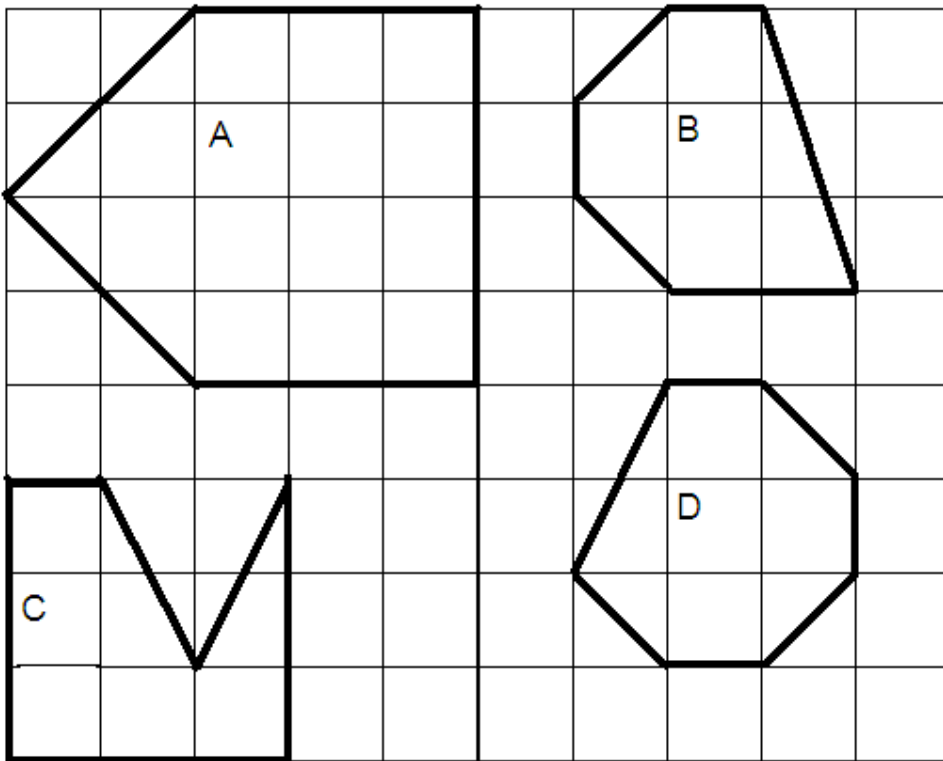.................................................. ..............................................

Evidence shown that child knows that
3 for 2  is best deal with some
explanation that
3 for 2 is 40p for 6 pencils
and half price is 50p for 6 pencils.

**1 mark**

**26. Here are 4 shapes on a square grid.**



**Complete the table.**

| | Property of shape | |
| --- | --- | --- |
| | Is a hexagon | Has at least one right angle |
| **Shape A** | x | ✓ |
| **Shape B** | ✓ | x |
| **Shape C** | ✓ | ✓ |
| **Shape D** | x | x |

**Table completed as above**

**1 mark**

**27.  Write in the missing digits**

| 1 | **2** | 7 | + | 7 | **3** | = | 2 | 0 | 0 |

**1 mark**

**28.  Lucy has 24 toy cars.**

$\dfrac{1}{2}$  **of them are red**

$\dfrac{1}{4}$  **of them are yellow**

**The rest of them are blue.**

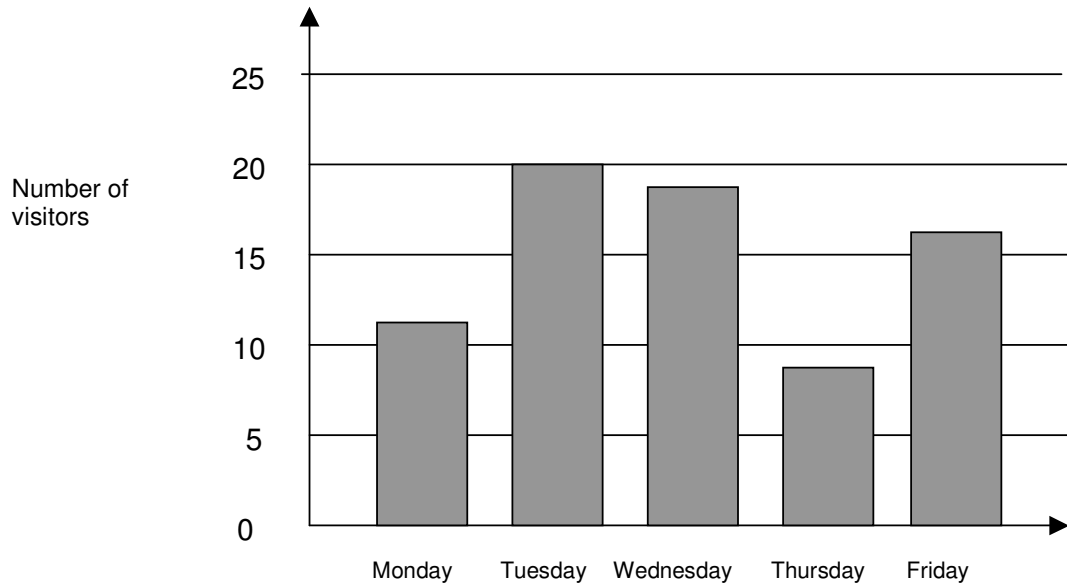**How many blue cars does she have?**

| 6 | cars |

**1 mark**

**29.  What is the remainder when you divide 54 by 7?**

| Remainder  5 |

**1 mark**

**30.  This graph shows the number of visitors to a school.**



**Estimate** how many more visitors there we on Tuesday than Thursday.

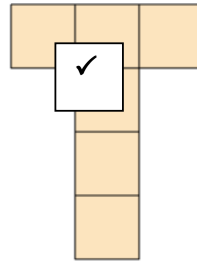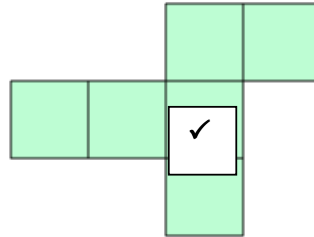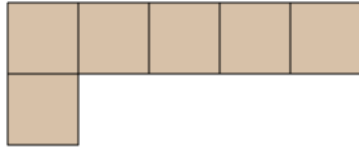| 12 |
|---|

**1 mark**

**31.  Write in the missing number.**

| 19 |
|---|

**x  3  =  57**

**1 mark**

**32.** <u>**Two**</u> **of these diagrams are nets for a cube.**

**Put a tick ( ✓ ) in them.**



**1 mark**