Hand in FOR MARKS by:

Name: Teacher

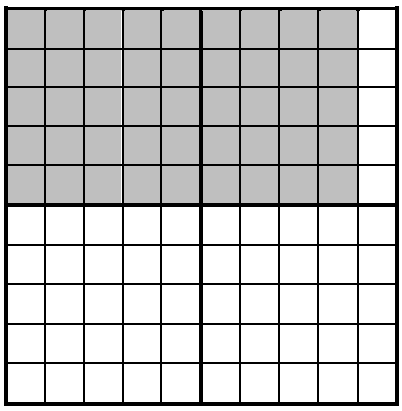
Percents Test Review

Outcome: N6.5 Demonstrate understanding of percent (limited to whole numbers to 100) concretely, pictorially, and symbolically.

1. Write as a percent. Then write as a decimal.

	percent	decimal
a) 24 out of 100	24%	0.24
b) $\frac{16}{100}$	16%	0.16

2. Use this grid to answer the following questions.



Level

1

a) What fraction of the grid is shaded? ___$^{45}/_{100}$___

b) What decimal of the grid is shaded? ___0.45___

c) What percent of the grid is shaded? ___45%___

d) What fraction, decimal and percent are equivalent? *(Which of the values in a,b,c are equivalent? List them in a sentence.)* All of the above are equivalent. $^{45}/_{100}$ = 0.45 = 45%

e) How are fractions, decimals and percents alike? *(explain in a sentence)* They represent the same quantity.

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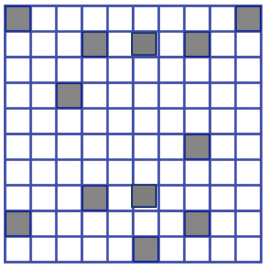
3. a) **Estimate** the percent of the grid that is shaded. ___about 10-15%___

b) Count the squares to check the **actual** percent. ___12%___



Level

2

4. Forty-four percent of children watch television before bed.

What percent do not watch television before bed?

Show your work.

100 – 44 = 56

56% of children do not watch tv before bed.

5. Write as a percent and a decimal.

a) $\frac{32}{100}$ ___32%___ ___0.32___

b) $\frac{9}{100}$ ___9%___ ___0.09___

6. Write as a fraction (*no need to simplify the fraction)* and a decimal.

a) 86% ___$^{86}/_{100}$___ ___0.86___

b) 40% ___$^{40}/_{100}$___ ___0.40 or 0.4___

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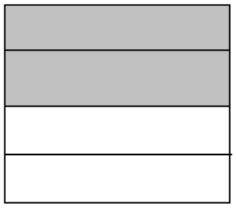
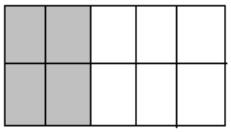
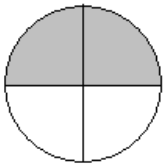
7. What percent is shaded? *(Remember…a percent is out of 100)First, make an equivalent fraction with a denominator out of 100. Then turn into a percent.*

A.  ____60%____

B.  ____50%___

C.  ___40%____

D.  ____50%___

Level 2

8. Pittsburg played Montreal. Carry Price saved 36 out of 38. Marc Andre Fleury saved 91% of the shots.

Which goalie saved the greater percent of shots? ___Price at 95%_____

Show your work here.

Price $\frac{36}{38}$ = 0.947 = 95%

Fleury = 91%

95% > 91%

Level 3

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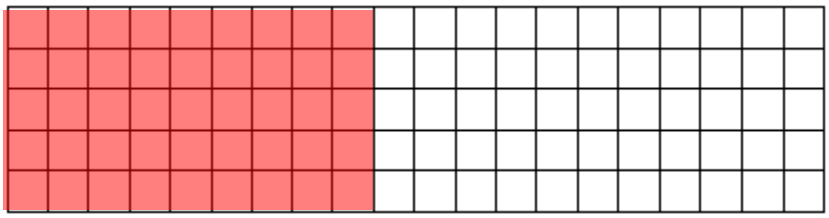
9. Use the grid to show a decimal number and a fraction equal to 45%. Record the decimal number and percent below.



45% = __0.45___ = ___$^{45}/_{100}$___

10. What percent of the stars are shaded? ____20%_____

11. Make up your own comparison chart. For example, compare the number of coloured shirts students in our class are wearing. The numbers should be recorded as a percent (totaling to 100).

Class' T-shirt Colour	Percent
Black	15%
Blue	8%
White	50%
Red	7%
Other	20%

Example

a) Make up one question that goes along with the results in your chart. If you need help, look at the next question (question #12).

_____Which colour makes up ½ of the shirts?

Answer your question: _____White_____

Example

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12. Use the data in the table.

The following is an approximate composition of the sun (numbers have been rounded off).

Gas	Percent
Hydrogen	92%
Helium	7%
Oxygen	0.5%
Carbon	0.3%
All other Gases (Neon, Iron, etc.)	0.2%

Level

4

Circle true or false. Show your work.

a) Less than 10% of the sun is composed of Helium. True or False

Helium = 7% 7% < 10%

b) Of the gases, $\frac{8}{100}$ were gases other than Hydrogen. True or False

7 + 0.5 + 0.3 + 0.2 = 8% 8% = $^{8}/_{10}$

c) More than $\frac{3}{4}$ of the gases was Hydrogen. True or False

¾ = 75% Hydrogen = 92% 92% > 75%

d) Less than 0.001 of the gases was Carbon. True or False

Carbon = 0.3% = 0.003 0.003 > 0.001