

Mathletics

Holiday Review – Year Seven

Converting Units:

Draw lines connecting the matching mass measurements below.

- | | | | | |
|----------|-----------------------|---|-----------------------|-----------------------|
| 4000 g | <input type="radio"/> | | <input type="radio"/> | 4 g |
| 40 kg | <input type="radio"/> | A | <input type="radio"/> | 400 kilograms |
| 0.400 t | <input type="radio"/> | 1 | 3 | 4 kg |
| 400 g | <input type="radio"/> | V | 6 | 0.4 kg |
| 0.40 mg | <input type="radio"/> | S | M | 40 mg |
| 4000 t | <input type="radio"/> | 4 | S | 0.04 Mg |
| 0.004 kg | <input type="radio"/> | E | 5 | $4 \div 10^7$ kg |
| 40000 mg | <input type="radio"/> | I | 7 | 40 grams |
| 0.04 g | <input type="radio"/> | | | 4×10^9 grams |

1	2	3	4	5	6	7

Algebra Basic:

Draw lines to match each table of values with the correct matching rule.

<table border="1"> <tr><td>a</td><td>0</td><td>2</td><td>4</td><td>6</td><td>8</td></tr> <tr><td>b</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr> </table>	a	0	2	4	6	8	b	2	3	4	5	6	•	• $b = 2a + 3$
a	0	2	4	6	8									
b	2	3	4	5	6									
<table border="1"> <tr><td>a</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> <tr><td>b</td><td>1</td><td>6</td><td>11</td><td>16</td><td>21</td></tr> </table>	a	1	2	3	4	5	b	1	6	11	16	21	•	• $b = \frac{a+4}{2}$
a	1	2	3	4	5									
b	1	6	11	16	21									
<table border="1"> <tr><td>a</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> <tr><td>b</td><td>0</td><td>3</td><td>6</td><td>9</td><td>12</td></tr> </table>	a	0	1	2	3	4	b	0	3	6	9	12	•	• $b = 3a$
a	0	1	2	3	4									
b	0	3	6	9	12									
<table border="1"> <tr><td>a</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> <tr><td>b</td><td>3</td><td>5</td><td>7</td><td>9</td><td>11</td></tr> </table>	a	0	1	2	3	4	b	3	5	7	9	11	•	• $b = 5a - 4$
a	0	1	2	3	4									
b	3	5	7	9	11									



Have a go at figuring out the rule used for each table of values below and fill in the gaps.

a) Rule:

x	0	1	2	3	4
y	5	6			9

b) Rule:

m	0	1	2	3	4
n	0	4		12	

c) Rule:

p	0	1	2	3	4
q	-3		-1		1

d) Rule:

c		1		5	6
d	-5	-1	3		19

