1) a)

| Total mass $=16.5$ tonnes |  |  |  |
| :---: | :---: | :---: | :---: |
| Crate | Crate | Crate | Fuel |
| 3300 kg | 3300 kg | 3300 kg | 6600 kg |

b)

2) a) 9.17 km
b) 6 buckets
3) 2.62 m

1) The correct answer belongs to Jacob.
$0.0751=75 \mathrm{ml}$
$75 \mathrm{ml} \times 3=225 \mathrm{ml}$
$225 \mathrm{ml}+1675 \mathrm{ml}=1900 \mathrm{ml}$
2) Bar model C best represents the problem as we know the total mass the jars is 0.9 kg or 900 g . The model shows that there is one pickle jar which has a mass of 250 g and five jars of jam. We can work out that the jam jars have a total mass of $900 \mathrm{~g}-250 \mathrm{~g}$ which is 650 g . To find the mass of each jar, $650 \mathrm{~g} \div 5=130 \mathrm{~g}$ One jar has a mass of 130 g .
3) $0.111=$ Bottle $D$
$0.91=$ Bottle $E$
$150 \mathrm{ml}=$ Bottle $B$
$0.251=$ Bottle $A$
$775 \mathrm{ml}=$ Bottle $C$
4) a) Mass of one box: $2.35 \mathrm{~g} \times 38=89.3 \mathrm{~g}$

Mass of 30 boxes: 2.679 kg
b) 5-6 kilograms: Least is 56 boxes and most is 67

1-2 kilograms: Least is 12 boxes and most is 22

