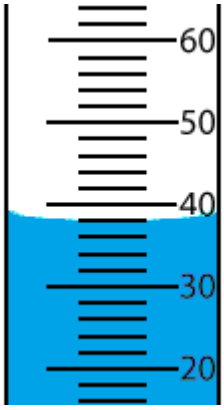
Basic Units #6 (Extension)



1. Give the reading shown on the dial on the left: .....

2. Give the reading shown on the measuring cylinder on the right: .....

3. What is measured in hectares? .....

4. At what temperature does butter melt, approximately? .....

5. What does an iPod mini weigh: 500 g 250g 100 g or 25 g ? .....

6. What is 0.8 mm in cm? .....

7. What is 8 m^2 in cm^2? .....

8. What is 0.97 tonnes in g? .....

9. What is 30 cm^2 in mm^2? .....

10. What is 0.6 km^2 in hectares? .....

11. What is 12.5 seconds in minutes? .....

12. What is two-fifths of an hour in minutes? .....

13. What is 10,000 seconds in hours? .....

14. What is 0.2 hours in seconds? .....

15. A machine delivers 5 grams per sec. What is that in kg per hour? .....

16. How many days would it take to get a tonne at 400 g per minute? .....

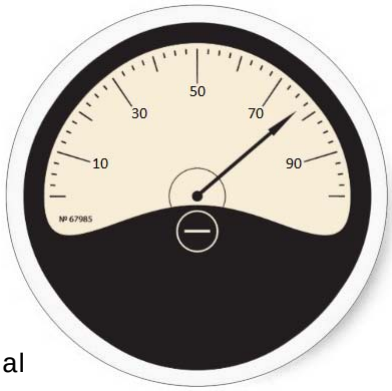
17. What is 155 seconds in minutes, as a decimal? .....

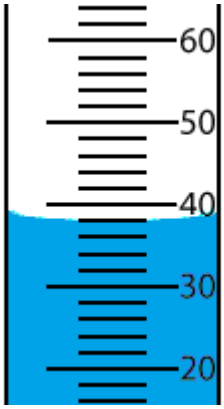
18. How many minutes is it from 10:57 p.m. to 1:33 a.m.? .....

19. Sydney is two hours behind NZ. What is the time in NZ when it is 11:35 p.m. on Monday in Sydney? .....

20. If it takes 4 hours 30 minutes to fly to Sydney. If a plane leaves Auckland at 22:34 on Wednesday, when does it arrive in Sydney (their time)? .....

Answers: Basic Units





#6 (Extension)

Note: don't leave out units

1. Give the reading shown on the dial on the left: **77.5 or 77** (each unit marked = 2½)
2. Give the reading shown on the measuring cylinder on the right: **38 ml**
3. What is measured in hectares? **any area** (but usually large areas of land such as farms)
4. At what temperature does butter melt, approximately? **between 32 and 35°C**
5. What does an iPod mini weigh? **100 grams**
6. What is 0.8 mm in cm? **0.08 cm**
7. What is 8 m^2 in cm^2? **80,000 cm^2** (1 m^2 = 1 m × 1 m = 100 cm × 100 cm = 10000 cm^2)
8. What is 0.97 tonnes in g? **970,000 g** (970 kg)
9. What is 30 cm^2 in mm^2? **3000 mm^2** (1 cm^2 = 10 mm × 10 mm = 100 mm^2)
10. What is 0.6 km^2 in hectares? **60 hectares** (1 ha = 100 m × 100 m = 10,000 m^2)
11. What is 12.5 seconds in minutes? $\frac{12.5}{60}$ **= 0.2083 minutes** (rounded 4 d.p.)
12. What is two-fifths of an hour in minutes? $\frac{2}{5}$ **× 60 = 24 minutes**
13. What is 10,000 seconds in hours? $\frac{10000}{60}$ **= 166** $\frac{2}{3}$ **minutes =** $\frac{166.66}{60}$ **= 2.778 hours**
14. What is 0.2 hours in minutes? **0.2 × 60 × 60 = 720 seconds**
15. What is 5 g / sec in kg / hr? **5 × 60 × 60 ÷ 1000 = 18 kg/hr**
16. How many days would it take to get a tonne at 400 g per minute? **nearly $1\,^3/_4$ days**
    1000 kg ÷ 0.4 kg = 2500 minutes. 2500 ÷ 60 ÷ 24 = 1.736 days
17. What is 155 seconds in minutes, as a decimal? **155 ÷ 60 = 2.5833 minutes** (4 d.p.)
18. How many minutes is it from 10:57 p.m. to 1:33 a.m.? **2 h 36 m = 156 minutes**
19. What is the time in NZ when it is 11:35 p.m. in Sydney? **1:35 a.m. Tuesday**
20. When does it arrive in Sydney? **00:34 Thursday in Sydney** (02:34 Thurs in NZ)