

Leckie & Leckie Secondary Science Dictionary
Answers to Problems
in the Leckie & Leckie
Secondary Science Dictionary

Answers to the problems in the Leckie & Leckie Secondary Science Dictionary

acceleration

acceleration = $(25 - 0) \div 5 = 5 \text{ m/s}^2$

acid

hydrogen

approximate

using a beaker with volume measurements

average

$17 + 23 + 11 = 51$

$51 \div 3 = 17$

baking powder

self-raising flour

carbohydrate

In fructose there are twice as many hydrogen atoms as oxygen atoms. In ethanol there are not twice as many hydrogen atoms as oxygen atoms.

cell

A cell membrane, vacuole and nucleus are present in both. A cellulose cell wall and chloroplasts are only present in a plant cell.

cement

calcium, aluminium, silicon, oxygen

characteristic

for example, a trunk

charcoal

If air is present, the wood burns.

compare

Both cells have a cell membrane, a vacuole and a nucleus. Only plant cells have chloroplasts and a cellulose cell wall.

cooling rate

$60 \div 6 = 10^\circ\text{C}/\text{min}$

cubic centimetre

$4 \times 3 \times 2 = 24 \text{ cm}^3$

deci-

10 cm

density

low densities

drug

a drug called nicotine

explosive

Nobel prizes

fern

in damp, shady places

gamete

23

gas pressure

Increasing the average speed of particles produces more collisions with the walls of the container. The gas pressure therefore increases.

generator

because the magnet spins faster inside the coil

global warming

combustion of fuels and respiration

glucose

hydrogen and oxygen

growth

$1.6 - 1.2 = 0.4 \text{ cm}$

invertebrate

A and D are invertebrates; the rest are vertebrates.

kelvin

$100^\circ\text{C} + 273 = 373 \text{ K}$

key

From left to right: myriapod, arachnid, insect, crustacean

litmus

that it is neutral

litre

100

molecule

ozone 3; methane 5

moment of a force

$0.3 \times 600 = 180 \text{ Nm}$

orbit

any planet except Mercury or Pluto, e.g. Earth

oscilloscope

3

parallel

the other lamp stays lit

potential difference

$V = 0.5 \times 3 = 1.5 \text{ V}$

prism

red, orange, yellow, green, blue, indigo, violet

product

magnesium sulphate and hydrogen

rainbow

red, orange, yellow, green, blue, indigo, violet

reactant

calcium carbonate and hydrochloric acid

repeat reading

Ignore 31.2 cm^3 and average the other three, so it is 24.9 cm^3 .

resistance

$6 \div 2 = 3 \Omega$

series

the other lamp goes out

Answers to the problems in the Leckie & Leckie Secondary Science Dictionary (continued)

solution

yes, by evaporation

symbol

O

thermometer

27°C

time

1.20 minutes is 1 min 12 s not 1 min 20 s.

volume

measuring cylinder, burette, pipette

weight

$(10 \div 6) \times 12 = 20 \text{ N}$

word equation

hydrogen + oxygen \rightarrow water

Published by Leckie & Leckie
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Leckie & Leckie Ltd is a division of Granada Learning Limited,
part of Granada plc.

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First published 2004

ISBN 1-84372-160-0

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British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library.

Design and illustrations

Ken Vail Graphic Design, Cambridge

Commissioned by Sarah Mitchell

Project management by Bruce Ryan

Editing by Jo Kemp