5. Verschiedene Lösungen.

6. a) Das kann nicht stimmen. Ein Mensch trinkt am Tag ungefähr 1–2 Liter.
   b) Das kann nicht stimmen. In eine Badewanne passen ungefähr 180 Liter.
   c) Das kann stimmen.

Seite 97

1. A 60 Zentimeterwürfel
   B 54 Zentimeterwürfel
   In den Quader A passen mehr Zentimeterwürfel.

2. a) 6 · 9 · 4 = 216
   b) 4 · 4 · 3 = 48
   c) 6 · 6 · 4 = 144
   d) 1 · 10 · 5 = 50
   e) 3 · 10 · 5 = 150
   f) 3 · 10 · 7 = 210
   g) 2 · 5 · 3 = 30
   h) 3 · 5 · 3 = 45
   i) 4 · 3 · 5 = 60
   j) 3 · 4 · 5 = 60

3. a) 10 · 10 · 10 = 1000
   b) 1000 Zentimeterwürfel = 1000 ml = 1 l
   In diesen Würfel passen 1 Liter.

4. a) 20 · 40 · 20 = 16000
   16000 ml = 16 l
   b) 30 · 60 · 30 = 54000
   54000 ml = 54 l
   c) 60 · 120 · 50 = 360000
   360000 ml = 360 l

Seite 98

1. a) 168 : 12 = 14
   216 : 12 = 18
   348 : 12 = 29
   660 : 12 = 55
   804 : 12 = 67
   b) 14808 : 12 = 1234
   28140 : 12 = 2345
   41472 : 12 = 3456
   54804 : 12 = 4567
   68136 : 12 = 5678
   c) 12480 : 15 = 832
   14310 : 15 = 954
   21780 : 15 = 1452
   44805 : 15 = 2987
   64935 : 15 = 4329

2. a) 9750 : 50 = 195
   9750 : 25 = 390
   1950 : 50 = 39
   1950 : 25 = 78
   11250 : 50 = 225
   11250 : 25 = 450
   b) 2250 : 25 = 90
   2250 : 50 = 45
   4500 : 50 = 90
   4500 : 25 = 180
   75350 : 25 = 3014
   75350 : 50 = 1507
   c) 6750 : 30 = 225
   6750 : 15 = 450
   16650 : 30 = 555
   16650 : 15 = 1110
   19980 : 30 = 666
   19980 : 15 = 1332
   d) 23670 : 15 = 1578
   23670 : 30 = 789
   351750 : 15 = 23450
   351750 : 30 = 11725
   74430 : 30 = 2481
   74430 : 15 = 4962
   e) 38520 : 12 = 3210
   38520 : 24 = 1605
   118512 : 12 = 9876
   118512 : 24 = 4938
   7848 : 12 = 654
   7848 : 24 = 327

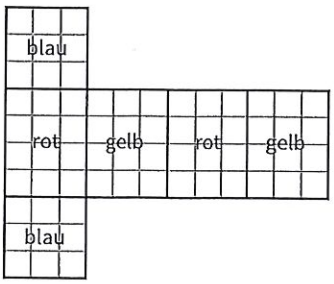
3. a) 9000 : 30 = 300
   Der Sauerstoff reicht für 300 Personen.
   b) Verschiedene Lösungen.

Seite 99

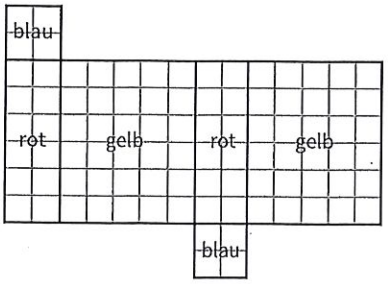
1. a) 124 kg = 0 t 124 kg = 0,124 t
   420 kg = 0 t 420 kg = 0,420 t
   1305 kg = 1 t 305 kg = 1,305 t
   4020 kg = 4 t 20 kg = 4,020 t
   b) 5002 kg = 5 t 2 kg = 5,002 t
   21305 kg = 21 t 305 kg = 21,305 t
   234 kg = 0 t 234 kg = 0,234 t
   10153 kg = 10 t 153 kg = 10,153 t

2. $\frac{1}{2}$ kg / 0,6 kg / 1,043 kg / 1,5 kg / 10,052 kg

3. A



B



4. a) 3 l = 3000 ml
   b) 5 l = 5000 ml
   c) $\frac{1}{2}$ l = 500 ml
   d) $\frac{1}{4}$ l = 250 ml
   e) $2\frac{1}{2}$ l = 2500 ml
   f) $1\frac{1}{4}$ l = 1250 ml

5. a) 5 · 10 · 5 = 250
   250 Zentimeterwürfel
   b) 4 · 8 · 6 = 192
   192 Zentimeterwürfel

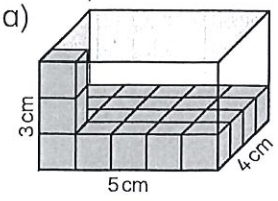
Seite 100

1. a) A 1 Jahr 2 Monate
   B 3 Jahre 4 Monate
   C 5 Jahre 5 Monate
   D 6 Jahre 7 Monate
   E 7 Jahre 10 Monate
   F 10 Jahre 1 Monat

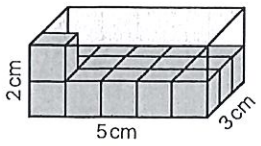
Lösung Ah

Rauminhalt – Zentimeterwürfel

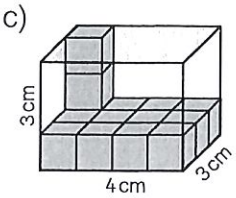
1 Berechne den Rauminhalt. Wie viele **Zentimeterwürfel** passen hinein?

a) 

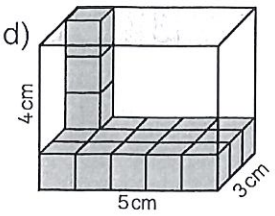
60

b) 

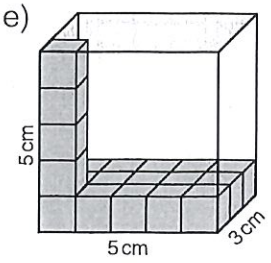
30

c) 

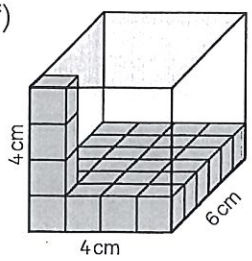
36

d) 

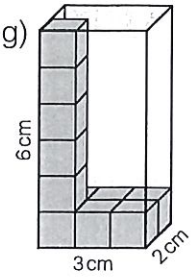
60

e) 

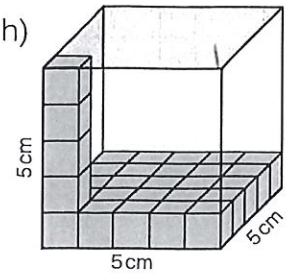
75

f) 

96

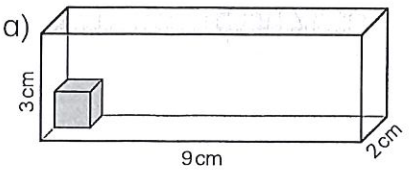
g) 

36

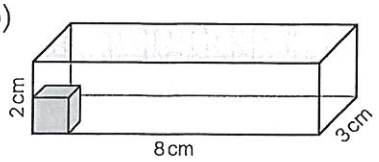
h) 

125

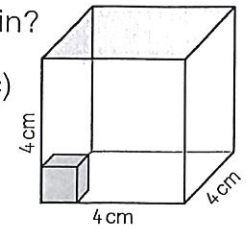
2 Berechne den Rauminhalt. Wie viele **Zentimeterwürfel** passen hinein?

a) 

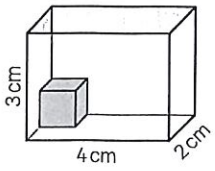
54

b) 

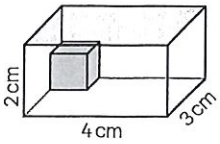
48

c) 

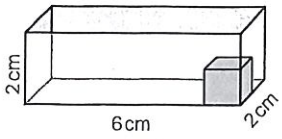
64

d) 

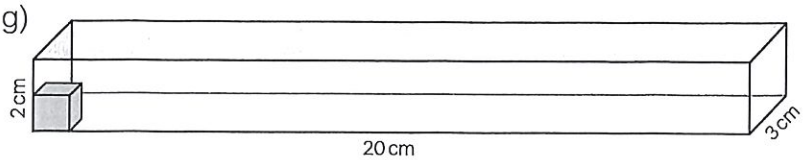
24

e) 

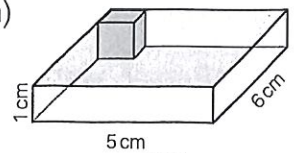
24

f) 

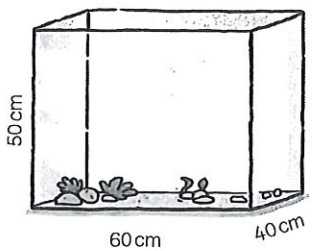
24

g) 

120

h) 

30

3 

Wie viele Liter Wasser passen in dieses Aquarium?

$5 \cdot 6 \cdot 4 = 120$

Antwort: Es passen 120 Liter hinein.

Lösung Ah

Schriftlich dividieren durch mehrstellige Zahlen

1 a)

456 : 12 = 38	756 : 12 = 63	888 : 12 = 74
36	72	84
96	36	48
96	36	48
0	0	0

b)

1140 : 12 = 95	4320 : 12 = 360	5760 : 12 = 480
108	36	48
60	72	96
60	72	96
0	00	00
	00	00
	0	0

38 63 74 95 360 420 480

2 a)

4950 : 50 = 99	4950 : 25 = 198	6725 : 25 = 269
450	25	50
450	245	172
450	225	150
0	200	225
	200	225
	0	0

b)

2580 : 30 = 86	2580 : 15 = 172	1800 : 15 = 120
240	15	15
180	108	30
180	105	30
0	30	00
	30	00
	0	0

86 99 100 120 172 198 269

3 Eine Person verbraucht pro Stunde etwa 30 Liter Sauerstoff.
Eine alte Rotbuche produziert ungefähr 12 000 l Sauerstoff pro Stunde.
Für wie viele Menschen reicht diese Menge an Sauerstoff eine Stunde lang?

```
12000 : 30 = 400
120
  00
  00
   00
   00
    0
```

Antwort: Die Menge Sauerstoff reicht eine Stunde lang für 400 Menschen.

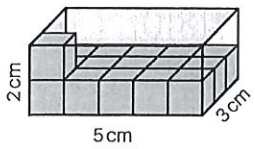
Abbildungen: Lottermoser, Elisabeth

Lösung föH

Rauminhalt – Zentimeterwürfel

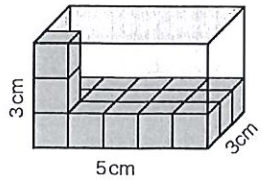
1 Berechne den Rauminhalt. Wie viele Zentimeterwürfel passen hinein?

a)



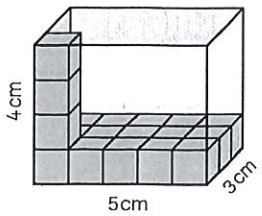
$2 \cdot 5 \cdot 3 =$ 30

b)



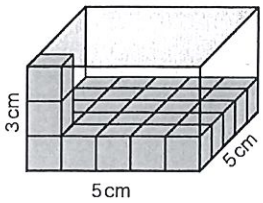
$3 \cdot 5 \cdot 3 =$ 45

c)



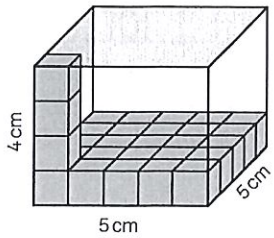
$4 \cdot 5 \cdot 3 =$ 60

d)



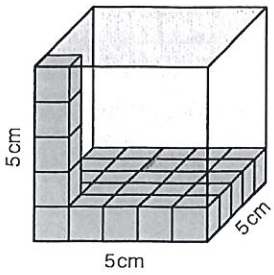
$3 \cdot 5 \cdot 5 =$ 75

e)



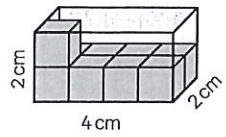
$4 \cdot 5 \cdot 5 =$ 100

f)



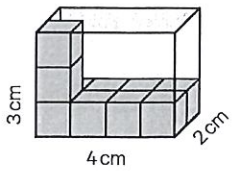
$5 \cdot 5 \cdot 5 =$ 125

2 a)



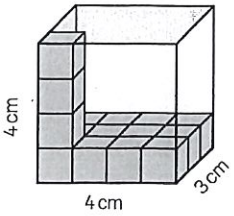
2 · 4 · 2 = 16

b)



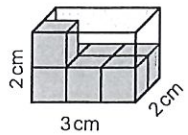
3 · 4 · 2 = 24

c)



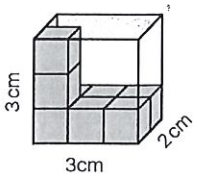
4 · 4 · 3 = 48

d)



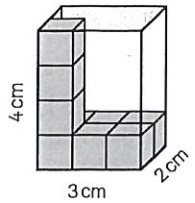
2 · 3 · 2 = 12

e)



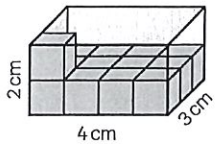
3 · 3 · 2 = 18

f)



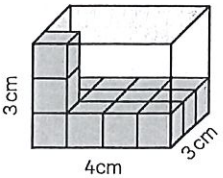
4 · 3 · 2 = 24

g)



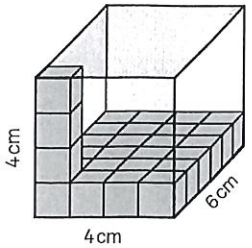
2 · 4 · 3 = 24

h)



3 · 4 · 3 = 36

i)



4 · 4 · 6 = 96

Evtl. mit Material nachbauen.

Lösung FöH

Schriftlich dividieren durch Zehnerzahlen

1 a)

8	4	0	:	3	0	=	2	8
6	0	↓						
2	4	0						
2	4	0						
		0						

b)

4	5	0	:	3	0	=	1	5
3	0	↓						
1	5	0						
1	5	0						
		0						

c)

4	8	0	:	3	0	=	1	6
3	0	↓						
1	8	0						
1	8	0						
		0						

d)

5	1	0	:	3	0	=	1	7
3	0	↓						
2	1	0						
2	1	0						
		0						

e)

9	6	0	:	3	0	=	3	2
9	0	↓						
	6	0						
	6	0						
		0						

f)

7	2	0	:	3	0	=	2	4
6	0	↓						
1	2	0						
1	2	0						
		0						

◂ ~~15~~ ~~16~~ ~~17~~ 18 ~~24~~ ~~28~~ ~~32~~

2 a)

7	2	0	:	4	0	=	1	8
4	0	↓						
3	2	0						
3	2	0						
		0						

b)

9	6	0	:	4	0	=	2	4
8	0	↓						
1	6	0						
1	6	0						
		0						

c)

7	6	0	:	4	0	=	1	9
4	0	↓						
3	6	0						
3	6	0						
		0						

d)

6	0	0	:	4	0	=	1	5
4	0	↓						
2	0	0						
2	0	0						
		0						

e)

5	2	0	:	4	0	=	1	3
4	0	↓						
1	2	0						
1	2	0						
		0						

f)

8	8	0	:	4	0	=	2	2
8	0	↓						
	8	0						
	8	0						
		0						

◂ ~~18~~ ~~16~~ ~~18~~ ~~19~~ 20 ~~22~~ ~~24~~

3 a)

5	5	0	:	5	0	=	1	1
5	0	↓						
	5	0						
	5	0						
		0						

b)

7	5	0	:	5	0	=	1	5
5	0	↓						
2	5	0						
2	5	0						
		0						

c)

6	0	0	:	5	0	=	1	2
5	0	↓						
1	0	0						
1	0	0						
		0						

d)

6	5	0	:	5	0	=	1	3
5	0	↓						
1	5	0						
1	5	0						
		0						

e)

8	0	0	:	5	0	=	1	6
5	0	↓						
3	0	0						
3	0	0						
		0						

f)

7	0	0	:	5	0	=	1	4
5	0	↓						
2	0	0						
2	0	0						
		0						

◂ ~~11~~ ~~12~~ ~~13~~ ~~14~~ ~~15~~ ~~16~~ 17