Worksheet - Multiplication and division problems

Year: Year 2 · 20

Show your working.

Question 1

Question 1 – Equal groups *(Section A · Practice)*

Write a multiplication for each picture and find the total.

a. 

b. 

c. 

Question 2

Question 2 – Write the number sentence *(Section A · Practice)*

Write a multiplication or division number sentence for each story, and solve it.

a. 5 bags with 10 sweets in each bag. How many sweets?
b. 30 pencils shared equally into 5 pots. How many in each pot?
c. 8 cars each with 2 children. How many children?
d. 18 cakes put into boxes of 2. How many boxes?

Question 3

Question 3 – Sharing or grouping? *(Section A · Practice)*

Say whether each problem is sharing or grouping, then solve it.

a. 15 apples are shared equally between 3 children. How many does each child get?
b. There are 15 apples. They are put into bags of 5. How many bags?
c. 20 pens are put into pots of 4. How many pots?
d. 20 pens are shared equally between 4 pots. How many in each pot?

Question 4

Question 4 – Bar models *(Section A · Practice)*

Use the bar models to find the missing numbers.



a. 18 shared into 3 equal parts
b. 40 shared into 4 equal parts
c. What multiplication checks each answer?

Question 5

Question 5 – Missing numbers *(Section A · Practice)*

Find the missing number in each number sentence.

a. __ × 2 = 14
b. 5 × __ = 40
c. __ ÷ 5 = 6
d. 30 ÷ __ = 3
e. 10 × __ = 80

Question 6

Question 6 – Fact families *(Section A · Practice)*

Write the other three facts in each fact family.

a. 3 × 4 = 12
b. 5 × 6 = 30
c. 10 × 9 = 90

Question 7

Question 7 – Eggs at the farm *(Section B · Real-life practice)*

A farmer collects eggs from her hens every morning. The eggs are put into boxes that hold 6 eggs each. This morning she fills 5 boxes. She then gives 2 whole boxes to the farm shop and sells the rest at the gate.

a. How many eggs are in 5 boxes?
b. How many eggs does she give to the farm shop?
c. How many eggs does she sell at the gate?
d. The farmer sells the eggs at the gate in boxes of 3. How many boxes of 3 can she make?

Question 8

Question 8 – Sharing the sweets *(Section B · Real-life practice)*

Hana has 30 sweets. She shares them equally between herself and 4 friends, so 5

children in all. Each child then gives 2 sweets to a younger brother or sister.

a. How many sweets does each of the 5 children get?
b. How many sweets do the 5 children give away altogether?
c. How many sweets do the children have left in all?
d. The 30 sweets could be put into bags of 10. How many bags is that?

Question 9

Question 9 – Football teams *(Section B · Real-life practice)*

There are 40 children at the school football club. The coach puts them into teams of 5 for a practice game. Each team needs a set of 2 balls. Later, the coach shares 24 bibs equally between the teams.

a. How many teams are there?
b. How many balls does the coach need for all the teams?
c. How many bibs does each team get?
d. The coach says, "If we had teams of 10 we would have 4 teams." Is he right? Show how you know.

Question 10

Question 10 – Seats on the coach *(Section B · Real-life practice)*

The school is going on a trip to the seaside. The coach has 12 rows of seats, with 2 seats on each side of the aisle in every row. So each row has 4 seats. Some rows are for adults. 2 rows are reserved for adults and the children use the other rows.

a. How many seats are on the coach altogether?
b. How many seats are for the children?
c. There are 32 children. Are there enough seats? Explain.
d. How many empty seats are there?

Question 11

Question 11 – Cooking biscuits *(Section B · Real-life practice)*

Mum and Ella are baking biscuits. The recipe makes 10 biscuits on each tray. They bake 4 trays. They put the biscuits equally into 5 tins. Ella eats 3 biscuits before they go in the tins.

a. How many biscuits do they bake altogether?
b. How many biscuits are left after Ella eats 3?
c. Instead, if they share all 40 biscuits equally into the 5 tins, how many are in each tin?
d. Mum says each tin can hold 10 biscuits. Is there room for all 40 biscuits? Explain.

Question 12

Question 12 – Garden plants *(Section B · Real-life practice)*

Grandad has a garden bed with 6 rows of plants. Each row has 5 plants. He plants 3 more rows of tomatoes with 5 plants in each row. After a storm 7 plants are damaged.

a. How many plants are in the first 6 rows?
b. How many tomato plants does he plant?
c. How many plants are there altogether before the storm?
d. How many plants are left undamaged after the storm?

Question 13

Question 13 – Pairs of shoes *(Section B · Real-life practice)*

A shoe shop puts shoes in boxes. Each box holds one pair, which is 2 shoes. The shop has 9 boxes on the first shelf and 7 boxes on the second shelf. A customer buys 4 pairs and the shop puts 10 more boxes on the shelves.

a. How many shoes are on the first shelf?
b. How many boxes are on the shelves at the start?
c. How many boxes are left after the customer buys 4 pairs and the shop adds 10 more?
d. How many shoes is that?

Question 14

Question 14 – Sticker album *(Section B · Real-life practice)*

Omar has a sticker album with pages for stickers. Each page holds 10 stickers. The album has 8 pages. Omar has already put stickers on 3 whole pages. He has 25 stickers left to stick in.

a. How many stickers does the album hold altogether?
b. How many stickers are already in the album?
c. How many more stickers can the album hold?
d. Omar sticks in his 25 stickers. How many empty spaces are left?

Question 15

Question 15 – The school sports day *(Section C · Problem solving)*

At sports day there are 4 houses. Each house has 5 teams, and each team has 4 children. Each child runs in one race, and each race has 5 children running. The teacher needs 2 cones for every race, and each cone pack contains 10 cones.

Information	Number
Houses	4

Information	Number
Teams in each house	5
Children in each team	4
Children in each race	5
Cones for each race	2

a. How many teams are there in all?
b. How many children take part in all?
c. How many races are there?
d. How many cones are needed for all the races?
e. How many packs of cones does the teacher need to buy? Explain your answer.

Question 16

Question 16 – The pet shop order *(Section C · Problem solving)*

The pet shop orders food for its animals. Rabbits get 5 carrots each day, hamsters get 2 seeds scoops each day and guinea pigs get 10 pieces of hay each day. The shop has 6 rabbits, 8 hamsters and 4 guinea pigs.

Animal	Number of animals	Food each day
Rabbits	6	5 carrots
Hamsters	8	2 scoops of seeds
Guinea pigs	4	10 pieces of hay

a. How many carrots do the rabbits eat each day?
b. How many scoops of seeds do the hamsters eat each day?
c. How many pieces of hay do the guinea pigs eat each day?
d. The carrots are sold in bags of 10. How many bags are needed for 2 days?
e. Is it true that the guinea pigs eat more pieces of hay than the rabbits eat carrots? Explain.

Question 17

Question 17 – Planning the class party *(Section C · Problem solving)*

Class 2 is having a party for 30 children. Each child gets 2 sandwiches, 1 drink and 5 grapes. Drinks come in packs of 6. Grapes come in bags of 50. The teacher also makes 4 trays of cakes with 10 cakes on each tray.

a. How many sandwiches are needed?
b. How many packs of drinks must the teacher buy for 30 drinks?
c. How many grapes are needed, and how many bags of 50 must be bought?
d. How many cakes are there? Is there at least 1 cake for each child?
e. If every child has 1 cake, how many cakes are left over?

Question 18

Question 18 – Building with bricks *(Section C · Problem solving)*

Jake builds a wall with toy bricks. The wall has 5 rows and each row has 8 bricks. His sister builds a wall with 4 rows of 10 bricks. They put all of the bricks into boxes that hold 20 bricks each.

a. How many bricks are in Jake's wall?
b. How many bricks are in his sister's wall?
c. How many bricks are there in total?
d. How many boxes are needed to hold all the bricks?
e. Whose wall has more bricks and by how many?

Question 19

Question 19 – A day at the swimming baths *(Section C · Problem solving)*

At the swimming baths there are 3 pools. Each pool has 4 lanes and each lane has 5 swimmers. The shop sells swimming caps in packs of 10. Each swimmer needs 1 cap. There are also 2 lifeguards by every pool, and each lifeguard gets 3 bottles of water.

a. How many swimmers are in one pool?
b. How many swimmers are there in all 3 pools?
c. How many packs of caps are needed for all the swimmers?
d. How many lifeguards are there altogether?
e. How many bottles of water do all the lifeguards get?

Question 20

Question 20 – Challenge: number stories *(Section D · Challenge)*

Otto has set you some tricky problems. Show how you solved each one.

a. A number is multiplied by 5, then 3 is added. The answer is 28. What is the number?
b. The product of two numbers is 24 and their sum is 10. What are the numbers?
c. Sam says, "I share 20 sweets between 6 children and each child gets the same, with none left." Is Sam right? Explain.
d. Write your own story problem for 4×5 and one for $20 \div 4$.