The Solar System - Answers

The **solar** system is made up of eight **planets** which orbit around the Sun**.**

The four smaller planets closest to the Sun are **M**ercury, Venus**,** **E**arth and Mars. They **are** made up of rock and **metal**. **T**he four outer planets are much larger. The **two** largest are Jupiter and Saturn, **composed** mainly of hydrogen and helium. The outermost **p**lanets are Uranus and **Neptune**. They are composed largely of ices, including frozen water**,** ammonia and methane**.**

Our solar system is located within one of **the** outer arms of the **M**ilky **W**ay galaxy, **which** contains about 200 billion stars.

Music Players and Your Hearing - Answers

Do you *know* how much time you spend listening *to* music on your music device? Do you turn it up so loud you that *can't hear* any outside noise*?* Well*,* you may be doing more harm than good!

*[*Music players are a great source of entertainment, but they are also the cause of *serious h*earing problems for young people today*.* *R*esearch has *found* that young *people* are more *likely* to play their music too loud, which can result in hearing loss later in life.

The ear piece*s* are designed to fit firmly in the listener*'*s ear canal, *allowing* outside noise to be eliminated*.* This means that the music is *p*umped directly into the ear, potentially causing permanent *damage*.

The Cat and the Whale

1. The author's purpose is to persuade the audience not to lie.

2. The moral of the story is not to lie. If you lie, you might get yourself into trouble.

3. The author includes this sentence because he/she wants the audience to know that the whale knew what the cat was trying to do; and that the whale was tricking the cat.

4. The author most likely has negative feelings towards the cat and thinks he is foolish for trying to lie to the whale.

Charlie and the Chocolate Factory

1. Sam liked the book better because it was descriptive, he could use his imagination, he went on an exciting journey and he could pick it up whenever he liked.

2. Tom liked the movie better because it showed him what the characters and the chocolate factory looked like. He could also sing along and laugh at what was happening.

3. Sam and Tom both liked the story because it was funny and about chocolate.

The Case of the Missing Cookie

1. The dog stole the cookie. Three clues include: there were short, brown hairs by the bottom of the bench, there was a tennis ball with crumbs on it just around the corner and there was a trail of crumbs leading out the back door to the grass.

2. The author used the words delicious cookie, distraught and scrumptious cookie.

3. The author could have looked around the back door, on the back porch, in the backyard.

4. The author could have seen the dog finishing off the cookie.

Paul the Policeman

1. c) a duck being arrested for stealing grapes

2. c) a policeman arresting a duck

3. c) a policeman calling for backup on the radio

4. This story is make-believe because:

- It is highly unlikely to see a duck stealing grapes from a fruit shop.

- It is highly unlikely a police officer would run after a duck.

- A police officer would not call for back up because of a duck.

- A police officer would not arrest a duck.

- A police officer would not get an award for arresting a duck.

Don't be Late for School

1. b) run down the driveway

2. Order of events:

    4 - Amelia ran back to grab her lunch.

    1 - Amelia jumped out of bed.

    3 - Amelia brushed her teeth.

    2 - Amelia put on her school uniform.

3. The last thing Amelia did before going to school was grab her lunch.

4. Amelia's list for getting ready for school: wake up, put on her uniform, put on her socks and shoes, brush her hair, wash her face, eat breakfast, brush her teeth and grab her lunch.

Milkshake Mania!

1. Write **F** for fact or **O** for opinion next to each statement.

    __O__ You could feel the excitement in the air.

    __F__ Today was the grand opening of Mary's Milk Bar.

    __O__ Mary's are the best milkshakes you will ever have!

    __F__ Travis was the first person to order a milkshake.

    __F__ Travis thinks chocolate is the best.

    __F__ Mary sold one hundred and eight milkshakes.

2. This statement is an opinion because Mary might think they are the best milkshakes in the world and another person might not like them at all. Everybody's personal taste is different.

Slip, Slop, Slap!

1. The main idea of this text is that the sun can be both beneficial and dangerous.

2. Three details may include:

    • The sun's rays give us Vitamin D.

    • The sun's rays can be damaging to us.

    • It is important to be sun-smart.

3. Important words include: sun, Vitamin D, dangerous, sun-smart, sunscreen, hat, shade, sunglasses.

4. Another good title for this text could be

    b) The Sun and our Health.

Something Scary in the Night

1. They are most likely in their new house. Clues include a moving truck, planning how to decorate the room.

2. Answers will vary. Teacher to check reasoning.

3. The main character describes their brother in this way as they obviously not enjoyed sharing a room together.

4. Answers will vary. Teacher to check reasoning.

TeachStarter.com

The History of LEGO

1. The inventor of LEGO was Godtfred Kirk Christiansen.

    The first LEGO model he made was a wooden duck.

2. The original LEGO Brick was made from wood.

    It began to be made out of plastic in the 1950s

3. LEGO 'Minifigure' people were first made in the 1970s.

    LEGO space, windows and doors were also introduced in the 1970s.

4. The LEGO Movie premiered in the 2010s.

5. The LEGO BRICK celebrated its 50th Birthday in the 1990s.

Australia Day

1. Mind map key words: Australia Day, January 26, 1788, celebrate, nation, great, original owners, Indigenous, British settlement, Australian citizenship, public events, Australian flag, family, friends, barbeque.

2. Australia Day is a day when our nation gathers together to celebrate the great things about our country. It is celebrated every year on January 26.

3. Australia Day is celebrated every year because it was on this day in 1788 that the British settled in Australia. On this day, we remember the Indigenous people of this country and welcome new citizens.

4. People celebrate Australia Day by attending public events, displaying the Australian flag and having a traditional Australia Day barbeque.
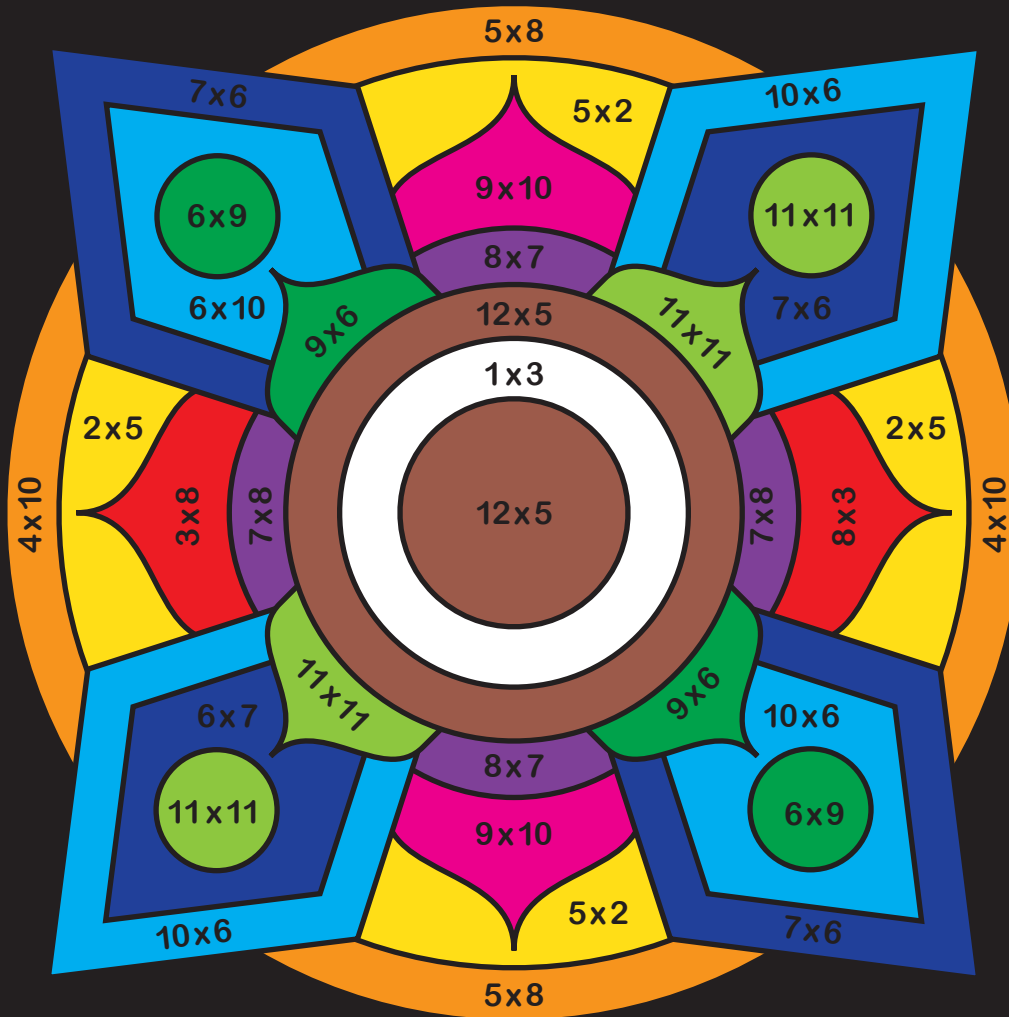
Verb Past Tense Worksheet   Name: _____

1.   Yesterday we **_looked_** for bugs in the park.

2.   We **_searched_** for bugs under rocks and on leaves.

3.   I **_saw_** a butterfly. It **_flew_** past the purple flowers.

4.   I **_lifted_** up a big rock and **_found_** a lady beetle.

5.   I **_placed_** it in my bug jar, so that I could show my parents

     when I **_got_** home.

6.   I **_caught_** three bugs at the park. I **_found_** a

     ladybug, a rhino beetle and a tiny bug that I didn't know.

7.   I **_thought_** my brother Sam could help me identify the

     tiny bug.

8.   We **_got_** out the bug book, and Sam **_opened_**

     my bug jar to get a closer look. The bug **_crawled_**

     up Sam's sleeve.

9.   It **_gave_** him a fright, and he

     spat out the water he was

     drinking.

10. We **_laughed_**

     until we **_fell_** down.

1 to 12 x Colour Fun!
Answer Sheet

12 x 2

3 white	40 orange	90 pink
8 black	42 dark blue	60 light blue
10 yellow	54 dark green	121 light green
24 red	56 purple	144 brown

Answers

1. (25 x $40) + (50 x $65) + (25 x $92) =
$1000 + $3250 + $2300 = $6550
The charity dinner raised $6550

2. (23 x 2) + (2 x 3) + (22 x 3) =
46 + 6 + 66 = 118
118 ÷ 8 = 14.75
They need to order 15 pizzas.

3. 135 minutes ÷ 15 = 9
Kim will see 8 buses and will leave on the 9th bus.

4. $3.35 x 4 = $13.40
The trip from home to the city cost her $13.40.

5. $385 780 x 6 = $2 314 680
$12 000 x 6 = $72 000
$2 314 680 + $72 000 = $2 386 680
The airline spent $2 386 680 on the planes.

6. 105 ÷ 14 = 7.5
Chloe has to order 8 boxes to make sure that she has enough tiles to complete her bathroom.

7. 2.5 kg = 2500 g
2500 ÷ 375 = 6.66
Alex will need to buy 7 packets of ham to make enough sandwiches for his team.

8. $418 ÷ 12 = $34.83
You will pay $34.83 per month. (Could be rounded to $34.85)

9. 2 L = 2000 ml
2000 ÷ 210 = 9.523
You will need to drink 9.5 cups of water to have the recommended 2 litres per day.

10. 14 ml x 45 = 630 ml
Sandy needs 630 ml to make 45 cupcakes.

Answers

11. $385 \div 9 = \$42.7777$
Each person was paid \$42.77 to clean up the lake.

12. 40 cups = \$8.00
7 x \$1.20 = \$8.40
It is better value to buy one packet of 40 cups than 7 packets of 5 cups.

13. 92 kg + 34 kg = 126 kg
165 kg - 126 kg = 39 kg
The forth boy weighs 39 kg.

14. $192 \div 20 = 9.6$
9.6 x 5 = 48
They need 48 balls.

15. $384\,000 \div 42 = 9\,142.85$
You would run appropximately 9143 marathons to get to the Moon.

16. 10 x 60 = 600 seconds
600 x 4 = 2400
There are 2400 babies born every 10 minutes.

17. 4th number is 2.
$2 \div \frac{1}{3} = 6$ (2nd number)
$6 \div 1.5 = 9$ (1st number)
$9 \times \frac{1}{3} = 3$ (3rd number)
The code is 9, 6, 3, 2.

18. 600 x 50 000 = 30 000 000
Your tyres will rotate 30 000 000 times before they need to be replaced.

19. $190 \text{ km} \div 8 \text{ km} = 23.75$
Neil replaces his shoes every 23-24 weeks.

20. 2 x 400 g = 800 g
20 kg = 20 000 g
$20\,000 \text{ g} \div 800 \text{ g} = 25$
Ralph needs a new bag of dog food every 25 days.

PANDORA'S PARTY PALACE

Lucy is buying some sweet treats for a party. She needs at least 80 sweet treats, but she doesn't want more than 100.

What combinations of sweet treats could Lucy buy for the party?

List some possibilities.

Calculate the total cost of the sweet treats for Lucy's party.

Answers may vary – Teacher to check.

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PANDORA'S PARTY PALACE

Taylor's class was having an end-of-year party. Taylor was asked to bring the drinks. His budget for the drinks was $40.

What combinations of drinks could Taylor buy for the class party?

List some possibilities.

Check that the drinks don't cost more than $40.

Answers may vary – Teacher to check.

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PANDORA'S PARTY PALACE

Mario is planning a pizza party for his birthday. He needs 36 mini pizzas to feed his friends.

How many boxes of mini pizzas does Mario need to buy?

Calculate the total cost of the mini pizzas for Mario's birthday party.

Answer: 6 boxes, total cost $48

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PANDORA'S PARTY PALACE

Amy's friends came over to her place for a movie night. Amy bought 5 packs of popcorn to share with her friends.

How many snack-size popcorn packets did Amy have at her movie night?

Calculate the total cost of 5 packs of popcorn.

Answer: 50 packets, total cost $27.50

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PANDORA'S PARTY PALACE

Mrs Small bought some party decorations for a surprise party for her class.

Mrs Small bought:

- 6 packs of streamers
- 4 packs of bunting
- 3 packs of party blowers.

How much did Mrs Small spend on decorations for the party?

Answer: total cost $31.80

PANDORA'S PARTY PALACE

Daniel and his family were going on a picnic with his cousins. Daniel's family was asked to bring the paper plates, cups and serviettes.

If there were 55 people were going to the picnic, how many packs of paper plates, cups and serviettes did Daniel's family have to buy?

Answer: 3 packs of paper plates, 3 packs of cups, 1 pack of serviettes

How much did Daniel's family spend on serving supplies?

Answer: total cost $18

PANDORA'S PARTY PALACE

Sam decided to buy sushi rolls and chicken nuggets for his birthday party. He wanted each guest to have 6 pieces of sushi and 6 chicken nuggets.

If Sam invited 12 guests, how many boxes of chicken nuggets and packs of sushi did he need to buy?

Answer: 4 boxes of nuggets, 4 packs of sushi

Calculate the total cost for Sam's party food.

Answer: total cost $96

PANDORA'S PARTY PALACE

As a special treat, Mr Wright wants to buy his class lollipops.

If there are 32 children in the class, calculate for Mr Wright:

- the total number of packs of lollipops
- the total cost of the lollipops.

Answer: 3 packs, total cost $6.54

PANDORA'S PARTY PALACE

Coach Carter needs enough bottles of water to give one to each player for the soccer gala day.

If 63 players are attending the soccer gala day, how many six packs of water should Coach Cater buy?

Answer: 63 bottles (11 six packs)

Calculate the total cost for the water.

Answer: total cost $30.25

PANDORA'S PARTY PALACE

Class 6A was having a cake stall to raise money for some new play equipment. They bought 14 boxes of cupcakes from Pandora's Party Palace and sold each cupcake at the stall for 50 cents.

Calculate:

• the total cost of the cupcakes
• the total profit made from the cake stall.

Answer: total cost $49, total profit $21

PANDORA'S PARTY PALACE

Naomi wants to decorate her house with bunting to welcome her grandparents back from an overseas trip.

Naomi needs 14 m of bunting to decorate the house.

Calculate how many packs of bunting Naomi must buy and the total cost of the bunting.

Answer: 5 packs, total cost $12

PANDORA'S PARTY PALACE

As part of their end-of-school year celebration, Principal Jones bought yoghurt ice blocks for every child in the school.

If there were 472 students in the school, how many boxes of yoghurt ice blocks did Principal Jones buy?

Calculate the total cost for the ice blocks.

Answer: 48 boxes, total cost $287.52

PANDORA'S PARTY PALACE

For a science experiment, Professor Paleo needed 180 balloons and 360 paper cups.

Calculate for the experiment:

- the total packs of balloons
- the total packs of paper cups
- the total cost for the balloons and cups.

Answer: 9 packs of balloons, 15 packs of cups, total cost $70.20

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PANDORA'S PARTY PALACE

On the weekend, Jenny had a party for her 12th birthday. Calculate the total cost if Jenny bought:

- 3 packs of balloons
- 4 packs of streamers
- 5 packs of bunting
- 4 boxes of yoghurt ice blocks
- 10 boxes of chicken nuggets
- 5 packs of popcorn
- 10 bottles of lemonade.

Answer: total cost $131.01

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PANDORA'S PARTY PALACE

To help celebrate New Year's Eve, Lilly bought some decorations from Pandora's Party Palace. Her budget for decorations was $100.

What combinations of decoration could Lucy buy for New Year's Eve?

List some possibilities, and then calculate the total cost Lilly spent on decorations.

Answers will vary – Teacher to check.

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PANDORA'S PARTY PALACE

You have been given a budget of $200 to organise your own party using items from Pandora's Party Palace.

After deciding on how many guests you will invite, make a list of the items you will buy and their total costs.

Calculate the total cost of the party to check that you have come in under budget.

Answers will vary – Teacher to check.

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Answers

1) In your own words, describe the adaptation process.

Adaptation is the process which enables organisms to adjust to their environment in order to ensure their survival.

2) What is a genetic mutation? Provide one example.

A genetic mutation is an alteration an organism is born with. Examples include a bird born with a slightly longer beak; a shark born with slightly stronger fins or a frog born with slightly longer legs.

3) What might happen if a genetic mutation proves to be successful?

If these mutations are successful, and help the animal to thrive in their environment, the animal may pass the same characteristic on to their offspring.

4) What are the three types of adaptations? Provide an example of each.

The three types of adaptations are structural, behavioural and physiological. For examples, refer to the corresponding paragraphs.

5) Decide whether the following statements are true or false.

a) Evolution is a very speedy process.   False

b) An animal may pass a genetic mutation on to its offspring.   True

c) Plants do not have structural adaptations.   False

d) Animals can change their behaviour to better suit their environment.   True

e) Physiological adaptations can be difficult to see from the outside.   True