

Problem Solving

Numbers and the number system

Objective.

- Know the number names and recite them in order from and back to zero.

Questions

1. James was counting the numbers around a clock. The big hand had covered over one of the numbers. He started counting "1, 2, 3, 5, 6, 7....." Which number did he miss out?
2. Sarah always counted the stairs when she walked up and down to her bedroom. She counted up from 1 to 12. When she counted back she went "12, 11, 10, 8, 7....." Which stair did she miss out?
3. Sam liked to count the cars that went past his house. He started counting "1, 2, 3, 4, 5, 6, 7, 8, 9" but he got stuck after this. Can you help him count up to 20?

Objective.

- Count on in twos from zero

Questions

1. Rory looked at the house numbers as he walked up his road. His house was number 2. He started "2, 4, 6" He counted all the way to 20. Which numbers did he see?
2. When Rory walked back down his road he crossed over. The first house he saw was number 19. He counted back in twos to number 1. Which numbers did he count?
3. Vicky was sorting out her sock drawer. She was trying to count how many socks she had. She had 6 pairs. How many socks was that altogether.

Objective.

- Begin to know what each digit in a 2-digit number represents.

Questions

1. Beth liked to buy sweets. Each packet of sweets had 10 sweets. Beth bought 3 packets. How many sweets were there altogether?
2. Megan had 40p in her pocket. She had 10p pieces. How many 10p's did she have?
3. Billy had 46p. He had four 10p's. How many 1p's did he have?

Objective.

- Say the number that is 1 or 10 more or less than any given number.

Questions

1. Nicola had 8 pages in her book to read. Joanne had 10 more pages than Nicola. How many pages did Joanne have to read?
2. Craig had been collecting toy cars. He had 10 more cars than James. James had 4 cars. How many did Craig have?
3. Carina had some pencils in her pencil case. She had 1 more than Emma but 10 less than Thomas. Thomas had 15 pencils. How many did Carina and Emma have?

Calculations

Objective.

- Understand the operation of addition

Questions

1. Sarah looked in her pond. She saw 8 fish. David had 3 more fish in his pond than Sarah. How many fish did David have?
2. Ben was 6 years older than his sister. His sister was 4 years old. How old was Ben?

3. Katie collected teddy bears. She had 8 teddy bears. For her birthday she added 3 more to her collection. How many did she have?

Objective.

- Understand the operation of subtraction.

Questions

1. Lilly Ladybird had 8 spots. Laura Ladybird had only 2 spots. How many more spots did Lilly have than Laura?
2. Thomas had 10 flowers in his garden. His mum picked 4 of them. How many were left?
3. Terry loved biscuits. He saw that there were 8 in the packet. When he came home from school there were only 3 left. How many had been eaten?

Objective.

- Identifying near doubles using doubles already known.

Questions

1. Sam had 8 smelly pens. Tim had 7. How many did they have altogether?
2. Jane bought 2 bags of sweets. In each bag there were meant to be 10 sweets. But the second had 11 in it. Jane was very pleased! How many sweets did she have altogether?
3. Carl collected toy soldiers. He had 5 and his brother had 6. How many toy soldiers did they have?

Objective.

- Begin to bridge through 10 and later 20.

Questions

1. Freda Frog loved jumping. She had 15 lily pads in her pond. Lily pad number 10 was the biggest lily pad. She started on lily pad number 8 then jumped on 5 more lily pads. Where did she land?
2. Darren had 8 cubes. His teacher gave him 5 more. How many did he have?
3. Ben walked 7 metres then he walked 6 more metres. How far did Ben walk?

Solving Problems

Objective.

- Use mental strategies to solve simple problems in money contexts.

Questions

1. Fiona had a 10p coin, a 5p coin and a 2p coin. How much money did she have?
2. Ryan had four 5p coins. He spent 2 of them. How much money did he have left?
3. Joshua had 4 coins in his pocket. Each coin was less than 10p. How much money could Joshua have had?

Objective.

- Use mental strategies to solve simple problems in measurement contexts.

Questions

1. William had a bottle of water. He could fill up 8 cups from his bottle. He poured out enough for 3 cups. How many cups of water were left in the bottle?

2. Lauren's doll weighed twice as much as Alice's doll. Alice's doll weighed 10 cubes. How much did Lauren's doll weigh?
3. Jim's pencil was half as long as Paul's pencil. Paul's pencil was 6 cubes long. How long was Jim's pencil?

Objective.

- Solve a given problem by sorting, classifying and organising information.

Questions

1. Mrs Brown had asked the children what colour eyes they had. There were 20 children in the class. 5 children had blue eyes, 6 children had green eyes. How many children had brown eyes?
2. Daisy had been finding out which type of food her friends liked best. She asked 14 of her friends. 3 of them liked pizza best, twice that number liked pasta best. How many liked sausages best?
3. Maddie was finding out which pets people had in the class. She found that her friends had cats, dogs and rabbits. 8 people had cats, 6 people had dogs, 10 people had rabbits. What was the most popular pet and the least popular pet? How many children did she ask?

Measures, Shape and Space

Objective.

- Order familiar events in time.

Questions

1. When Micah woke up he got out of bed washed his face, brushed his teeth, brushed his hair and put his school clothes on. What did he do second? What did he do last?
2. At school red class did p.e first thing in the morning then they had numeracy before lunch. After lunch they had literacy and music. What two things did they do before lunch? What happened just before literacy?

3. Mr Smith liked to go for a walk after work. On his way he passed a letterbox, some trees, a bus stop and a playground. What did he pass after the trees? What did he pass before the playground?

Objective.

- Know the days of the week and the seasons of the year.

Questions

1. Sally looked forward to Wednesday because it was the day she did horse riding. It was the day before. What day of the week was it?
2. 2 days of the week begin with the letter s, which are these and what is the day before these 2 days?
3. If today is Tuesday, what was yesterday and what will tomorrow be?
4. Mummy has her birthday in July. Charlotte has her birthday in June. Tom has his birthday in January. Does anyone have their birthday in Spring?

Objective.

- Read the time to the hour or half hour

Questions

1. Ben looked at the clock. The big hand was pointing up. The little hand was pointing down. What was the time?
2. Karen looked at her watch. The big hand was pointing down and the little hand was halfway between 9 and 10. What was the time?
3. Scott was looking forward to playtime. It was 10 o'clock when he looked at his watch. His teacher said playtime was in half an hour. What time was playtime?

Objective.

- Use everyday language to describe features of familiar 2D shapes.

Questions

1. Sam was trying to describe the pattern on his new t-shirt. He said the shape had straight sides. 2 of the sides were the same length and the other 2 sides were a bit longer. What shape was Sam trying to describe.
2. Nick had a feely bag. He put his hand inside and felt a shape. The shape had straight sides and 6 corners. What shape had he picked up?
3. Emily was drawing a picture of a house. She had some shapes to draw around to help her. What shapes could she use for each of the parts of the house?

Objective.

- Use everyday language to describe features of familiar 3D shapes.

Questions

1. James was making a robot out of some boxes and other things he had found around his house. He used a large cornflakes box for the body and some Pringles tubes for the legs. What shapes had he used?
2. Robin put his hand into a feely bag. He was pleased to feel something that felt like a football. What shape had he found?
3. Chloe walked down the road and saw a thing on the road. She described it to her mummy. She said it was round at the bottom and then got pointy at the top. It looked like a witches hat. It was bright orange and white. What shape had Chloe seen? What do you think it was?

Objective.

- Use everyday language to describe position, direction and movement.

Questions

1. In Aaron's bedroom he had a bunk bed. His brother slept in the same room as Aaron. Can you describe who slept where?
2. Rosie had some new wallpaper. It had pictures of balloons. The pattern was symmetrical. What could it look like?
3. Wing went to the circus and he saw a clown. The clown did a handstand and cartwheel. Wing tried to draw a picture of the clown. How could he make the clown look like he was doing a cartwheel and a handstand?