1. Read this magazine article

The Story of Penicillin

Alexander Fleming was born on a farm in Scotland on August 6, 1881. He was the seventh of eight children. As a boy Fleming was never one to worry about neatness. He loved exploring the countryside with his eight siblings in the isolated area of Scotland in which they lived.

When he finished school, Fleming trained as a doctor. He liked experimenting with bacteria and germs and often grew cultures in unwashed, shallow, circular dishes. One day, Fleming accidentally made a big discovery that made him very famous. Fleming was going on holiday for two weeks. He left his London laboratory in a mess and left his window open by mistake. In his haste, he also forgot to clean up an old dish that he had smeared with a bacteria culture that he was studying. Soon after he left, a spore containing a rare strain of a fungus mould called Penicillium, drifted into his laboratory through the open window from another laboratory in the same building. By chance, it settled onto the messy culture dish with its bacteria. This mould was very much like that found on stale bread.

If that wasn’t lucky enough, the weather became colder and the room temperature briefly dropped, so the Penicillium mould began to grow. The weather soon heated up again, and the bacteria on the dish sprouted like a weed. However, one spot did not grow. In fact the bacteria on that spot had died. That one spot caught Fleming’s attention when he returned from his holiday. It was the spot where the Penicillium spore had settled and grown. Fleming believed he had discovered something very important. He said. “One sometimes finds what one is not looking for.” He called this mould Penicillin.

Fleming carefully tested his new discovery on animals but without harming them, since he loved all living creatures. His discovery was made in 1929 and was printed in magazines, but no one showed any interest until World War II (1948), when it was used to save many lives. Today, Penicillin is used to treat all kinds of bacterial infections. Perhaps you have even had an antibiotic that contains Penicillin when you were ill?
2. Oral questions
   Answer these questions orally in full sentences.
   1. Why is Alexander Fleming famous?
   2. How many people were there in Alexander Fleming’s family?
   3. Which words tell us that Fleming was untidy when he was a child?
   4. Which words tell us that Fleming was untidy when he was an adult?
   5. Which word tells us that the Fleming farm in Scotland was out of the way?

3. Written comprehension
   Answer these questions. Remember to check your spelling and punctuation.
   1. How old was Alexander Fleming when his discovery saved many lives and made him famous?
   2. What accidentally happened that helped Fleming make his discovery?
   3. Can you explain in your own words, what happened to the bacteria culture when Fleming was on holiday?
   4. In which city was Fleming living when he made his discovery about penicillin?
   5. What do you think Fleming meant when he said, “One sometimes finds what one is not looking for?”
   6. Why did Fleming think that his discovery would work on humans?
   7. Have you ever seen the mould on stale bread? Can you describe it?
   8. Use a dictionary to find the meanings of these words:
      • siblings
      • sprouted
      • shallow
      • antibiotic
   9. Break these words into syllables:
      • vacation
      • bacteria
      • antibiotic
      • magazines
   10. Change these words into the plural:
        laboratory, dish, discovery

4. Writing (Creative)
   Write a short story about someone that you consider to be your hero. This could be a parent, a relative, a friend or someone in the community that you admire greatly. Use a good collection of adjectives to describe your hero. Tell us something interesting about him or her and mention why that person has become your hero.
5. **Write a newspaper article (Transactional)**

Most news stories are written by asking questions (Who? What? Where? When? Why? How?) The questions who, what, where and when are answered in the first paragraph. The questions why and how are answered in the second paragraph.

Write a short newspaper article consisting of two paragraphs about Alexander Fleming’s discovery of Penicillin. Use your own words.

6. **Language structure and use**

A. Fill in one of the connecting words.

1. I play soccer ........................................... I can run fast.
2. I like card games ........................................... I don’t like ball games.
3. We wear red shirts ........................................... we can see all our players.

B. Write these sentences in the future tense. Start each sentence like this:

   Next week …

   1. Thandi has a birthday party.
   2. She writes out the invitations to her party.
   3. Her mother bakes a cake.
   4. She puts ten candles on it.
   5. Pam is making a special birthday gift for Thandi.

C. Find the most suitable adjectives from the word bank and add them to the sentences

   loud • large • old • gruff • long • curly • hairy
   tiny • huge • playful • energetic • smooth • sharp

   1. That pig has a very ..................................................... tail.
   2. The dog has a ..................................................... voice when he barks.
   3. Her kitten has extremely ..................................................... claws.
   4. I also have an ...................................................... rabbit that runs and hides in the garden.
   5. Russian hamsters are such ..................................................... creatures.

D. **Subject: Verb agreement.**

   Fill in the verb that agrees with the subject

   1. My sister is/are coming home this weekend.
   2. He always share/shares his toys with me.
   3. My class has/have a lot of homework today.
   4. She look/looks nice in that dress.
E. Tenses. Change these sentences to the simple present tense
1. Alexander Fleming lived in a remote part of Scotland when he was growing up.
2. The Fleming siblings played together on their farm.
3. He discovered Penicillin.
4. The two boys ran around the big field.
5. His mother went to town and bought bread.

F. Change these sentences to the simple past tense
1. The girl eats cereal for breakfast every morning.
2. The wind howls through the trees.

G. Punctuation. Add capital letters, full stops, commas, question marks and exclamation marks to these sentences.
1. Mandy bought peas, carrots, bananas and apples at the store.
2. Where is your mother driving to, John?
3. Stop pushing that chair around, Tom.
4. I live in Claremont, which is in Cape Town.
5. Ben goes to gym every Monday and Wednesday afternoon.
Revision – Gr 4: Term 4 (Answers)

Where applicable, write the answers in your class workbook.

1. **Read this magazine article**

2. **Oral questions**
   
   Answer these questions orally in full sentences.
   
   2. How many people were there in Alexander Fleming’s family? *Ten people*
   3. Which words tell us that Fleming was untidy when he was a child? *Fleming was never one to worry about neatness.*
   4. Which words tell us that Fleming was untidy when he was an adult? *He left his London laboratory in a mess.*
   5. Which word tells us that the Fleming farm in Scotland was out of the way? *isolated*

3. **Written comprehension**
   
   Answer these questions. Remember to check your spelling and punctuation.
   
   1. How old was Alexander Fleming when his discovery saved many lives and made him famous? *He was fifty seven years old.*
   2. What accidentally happened that helped Fleming make his discovery? *He left his London laboratory in a mess and left his window open by mistake.*
   3. Can you explain in your own words, what happened to the bacteria culture when Fleming was on holiday? *Own words*
   4. In which city was Fleming living when he made his discovery about penicillin? *He was living in London*
   5. What do you think Fleming meant when he said, “One sometimes finds what one is not looking for?” *Own thoughts*
   6. Why did Fleming think that his discovery would work on humans? *It is because it had worked on animals.*
   7. Have you ever seen the mould on stale bread? Can you describe it? *Own words*
   8. Use a dictionary to find the meanings of these words:
      - *Siblings-brothers and sisters*
      - *Sprouted-sends out shoots*
      - *Shallow- of little depth*
      - *Antibiotic-a medicine (such as penicillin) that inhibits the growth of or destroys microorganisms.*
9. Break these words into syllables:
   - va/ca/tion
   - bac/ter/i/a
   - an/ti/bi/otic
   - mag/a/zines

10. Change these words into the plural:
    laboratories, dishes, discoveries

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