

Pedagogy Content Knowledge
Science
Grade 4
Theme – Plants

1. Science is not
 - a. Inclusive
 - b. Able to answer all questions
 - c. Expanding
 - d. Counter-intuitive at times

2. When thinking about how to approach a science lesson, I should NOT consider
 - a. How and when will I express the learning objective?
 - b. How will I involve pupils more?
 - c. To what extent do these students need to see, do or hear things?
 - d. How will I keep the students engaged that gives me some space to plan my next class better?

3. While planning my lesson, I must keep in mind to
 - a. Find out what children already understand, know, and can do
 - b. Include elements to capture and hold my students' attention
 - c. Always initiate investigations so that things are clear to students
 - d. Involve students in reflection and self-assessment

4. I make use of the power of questions by asking
 - a. Open and closed questions
 - b. Productive and unproductive questions
 - c. Attention-focusing and attention grabbing questions
 - d. Measuring and counting questions

5. When a student puts a question, I should
 - a. Ask questions like – 'what do you think?' or 'is this similar to anything that you have seen?'
 - b. Find out more about his/her understanding – 'can you tell me why you ask that?'
 - c. Tell him politely to focus on the topic at hand and stop getting distracted.
 - d. Ask with excitement – 'what a great question, how could we find that out?'

6. Green plants
 - a. Respire at night only
 - b. Use energy from the Sun to produce food
 - c. Produce oxygen for us to live
 - d. Do not move

7. Plant tissues
 - a. Perform random functions,
 - b. Suck food from the soil,
 - c. Are all green
 - d. Can photosynthesize if they contain chlorophyll

8. Trees on sloppy, hilly terrain grow very tall because
 - a. They get loads of fresh air to breathe
 - b. They get good sunlight
 - c. They are competing with neighboring trees to get sunlight
 - d. They are not harmed by pollution from industries

9. Some students treat plants and plant materials as if they have no value. I would-
 - a. Help them understand how plants are miracle on earth, giving us sustenance by providing food and oxygen.
 - b. Give them a lecture on the significance of plants in Indian culture, giving examples of how even plants are worshipped by people.
 - c. Give amazing facts about plants that help organisms- for example, an oak tree supports thousands of insects.
 - d. Help them learn to care for plants by growing a couple of potted plants.

10. Flowers
 - a. Are pollinated by only a few chosen flying insects,
 - b. Are fertilized before pollination,
 - c. Can be pollinated more than once
 - d. Cannot self-fertilize