

Senior Science Bee Sample Paper

Dear Contestants

Please note that the following Science Bee questions are for guidance only. The actual questions in the contest may vary. Syllabus is the basis on which the question papers are set.

1. Northern Lights observed over the North Pole
 - A. Aurora Borealis
 - B. Aurora Australis
 - C. Midnight Sun
 - D. Midnight Moon
 - E. Polar Flare
2. Pascal is a unit of measure of
 - A. Force
 - B. Pressure
 - C. Area
 - D. momentum
 - E. Velocity
3. ____ tides are weak tides that take place when Sun and Moon are at right angles to the Earth.
 - A. Neap
 - B. Spring
 - C. Peak
 - D. Noon
 - E. Fall
4. Electromagnetic waves are _____ waves
 - A. Compressional
 - B. Transverse
 - C. Crest
 - D. Trough
 - E. Maximum
5. In pea plants Yellow seed color is dominant while Green is recessive. How will you determine that a yellow seeded plant is homozygous (YY) or heterozygous (Yy) for seed color?
 - A. Do a test cross with pure dominant (YY) Green seeded plant. If 100% of F1 generation are Yellow, then the parent Yellow plant is homozygous (YY). If 50% of F1 generation is Yellow and other 50% are Green, then the parent Yellow plant is heterozygous(Yy)
 - B. Do a test cross with pure dominant (YY) Green seeded plant. If 50% of F1 generation are Yellow, then the parent Yellow plant is homozygous (YY). If 100% of F1 generation is Yellow and other 50% are Green, then the parent Yellow plant is heterozygous(Yy)
 - C. Do a test cross with recessive (yy) Green seeded plant. If 100% of F1 generation are Yellow, then the parent Yellow plant is homozygous (YY). If 50% of F1 generation is Yellow and other 50% are Green, then the parent Yellow plant is heterozygous(Yy)
 - D. Do a test cross with recessive (yy) Green seeded plant. If 50% of F1 generation are Yellow, then the parent Yellow plant is homozygous (YY). If 50% of F1 generation is Yellow and other 100% are Green, then the parent Yellow plant is heterozygous(Yy)
 - E. Do a test cross with recessive (yy) Green seeded plant. If 75% of F1 generation are Yellow, then the parent Yellow plant is homozygous (YY). If 50% of F1 generation is Yellow and other 25% are Green, then the parent Yellow plant is heterozygous(Yy)