

سائنسدانوں یا ان لوگوں کے لیے جو سائنسی طریقہ کار استعمال کرتے ہیں، ان خیالات کو قابل قبول ہونے کے لیے ضروری ہے کہ وہ حقائق پر مبنی ہوں۔

The discoveries of scientists have helped people develop an attitude of open-mindedness. They are more willing to look for new truths than to assume that what has been considered true will always be true. Because people have had to change their old ideas as a result of new discoveries made by scientists, they are less likely to accept conclusions as final.

سائنسدانوں نے کھلے دل کے رویے کو پروان چڑھانے میں لوگوں کی مدد کی ہے۔ وہ چیزوں کو فرض کرنے کی بجائے، نئی سچائیوں کو تلاش کرنے کے زیادہ خواہش مند ہیں۔ چونکہ لوگوں کو سائنسدانوں کی نئی دریافتوں کے سبب اپنے پرانے خیالات تبدیل کرنے پڑتے ہیں۔ اس لیے اس بات کا امکان کم ہے کہ وہ نتائج کو حتمی تسلیم کر لیں۔

Solution of Exercise

Q1: How has the scientific method helped us in our fight against disease?

Ans: Today babies are born in hospitals where there is little likelihood of their getting a disease. Young people are treated to protect them against smallpox, diphtheria, and typhoid fever. Today a person can expect to live to be almost seventy years old. In other words, more than thirty years have been added to the expected length of man's life. These changes have been made possible by use of the scientific method to solve such problems as the causes of disease and its prevention.

Q2: Write a note on the better sanitary condition available in our cities today and compare them with what they were like a hundred years ago.

Ans: Today our streets are paved and well drained. In past streets were not paved and were not properly drained. In past there had been no enough water for household usage. Now water is carried through pipes from long distance to homes. The streets were full of garbage and outdoor toilets were common on past.

Q3: What is the sanitary condition like in our villages today and how would improve them?

Ans In our villages, the sanitary condition are not proper. The streets are unpaved and water runs through open drains. Wells are situated in open air. System of cleanliness is inadequate in villages. The conditions can be improved through setting up water and sanitation departments and creating awareness among the people.

Q4: How has the scientific method helped us in the production and preservation of foods?

Ans: Science has greatly helped man in producing and preserving food. Modern machinery is used to produce foods. Now it is possible to obtain all kinds of foods throughout the year. In past, there was no proper system of preserving food, but now food is preserved through use of modern techniques.

Q5: We are now generally less fearful than our ancestors. What are our ancestors afraid of?

Ans: Our ancestors were superstitious and believed in good and bad luck, fear black cats, broken mirrors, and number 13. Superstitious beliefs are being overcome by using scientific methods. Now we think logically and believe that there is good reason for every happening. Now people have developed an attitude of open mindedness.

Q6: How has the scientific method enabled us to get over the old fears?

Ans: Our ancestors were superstitious and believed in good and bad luck, fear black cats, broken mirrors, and number 13. Superstitious beliefs are being overcome by using scientific methods. Now we think logically and believe that there is good reason for every happening. Now people have developed an attitude of open mindedness.

Q7: What part did astrology play in the lives of men and women in the past? Give examples.

Ans: Astrology is the knowledge of stars, through which people forecast about the future life of people. The lives of people were greatly influenced by astrology in past. But today, it does not influence the lives of as many people as it once used to do. Now people think logically and believe in worldly circumstances for the events which happen around them.

Q8: Describe some of the superstitions still current in our country. How do they affect the lives of those who believe in them?

Ans: It is true that science has changed our lives, but still few superstitious beliefs are practiced. For examples wearing charms good and bad luck, fearing black cats etc, are some superstitious beliefs still practiced in our country.

Additional Questions Answers

Q1: Why was water not enough for household use in past. How is it solved today?

Ans: A century ago it was common practice in many cities to bring water by the bucketful for household use. Water had to be carried a considerable distance from the well to the home. It was, therefore, used very sparingly for bathing and cleaning purpose. Often it came from sources that contained disease-producing germs.

Towns and cities today have water systems that usually provide water enough for household use. One of the most important problems in the growth of cities has been to provide sufficient water to meet the many needs of an increasing population.

Q2: How has the science brought changes in human attitude?

Ans: People have become open-minded; it was due to science that people are now more realistic. They have now changed their superstitious thoughts. Through scientific method it has been demonstrated that ideas are not necessarily true because they have been believed for a long time. Ideas must now be supported by facts in order to be acceptable to the scientist or people who use the scientific method.