## THE LITTLE MECHANIC

What did Issac's grandmother think he would become? What opinions did the neighbours have?

**A**Ans 1 Isaac's grandmother thought that Isaac would be an excellent workman when he grew up. She was sure that he would do well in the world.

Some of her neighbours may have thought that Isaac would make beautiful furniture. Some may have thought that he would become an architect who would build great mansions and churches with tall steeples. Yet others may have thought that he would become a clockmaker when he grew up.

Mention any two creations of young Isaac.

ANS 2. Isaac had made a sundial which could tell the time when it was bright and sunny. He had also made a clock which was set to work by the dropping of water. The sundial and the water clock helped his grandmother tell the time whether it was bright or cloudy.

Reference to the context.

"That unseen, inconstant and ungovernable wonder"

- 3. What is the' Wonder' referred to here?
- 3.. The wind is the wonder referred to here.
- 4. Why has the wind been called inconstant?
- 4. The wind has been called inconstant because the wind keeps changing both speed and direction. It can blow however it likes-gently as a breeze or strongly as a storm. It is ungovernable because no one can control the wind.
- 5. How did Isaac calculate the force of the wind? ans Isaac made the wind tell him the measure of its strength. He did this by jumping against the wind. By the length of his jump he could calculate the force of the wind.

5What kind of a windmill did Isaac build? Did it actually work? How can you tell?

ANS5. Isaac built a small model windmill. It was complete in its parts and machinery. It had little linen sails that whirled around when there was a wind. We know that the model windmill really worked because if wheat was put into the little hopper of the windmill, it would be converted into flour.

6 How did Isaac Newton study the mechanism of the universe?

6Isaac Newton studied the mechanism of the universe by reading books on mathematics and natural philosophy. He also thought deeply about different things; for instance, he gazed curiously at stars and wondered about their nature, distance and power.

7Which discoveries by Isaac Newton does the text mention? Ans The text mentions that Isaac Newton was the first to find out the nature of light. He discovered the force of gravitation, and then figured out all the laws by which planets are guided through the sky.

8. In this statement, the sea or the ocean has been compared to the truth. What has been represented as "a curious shell or a pretty pebble"? Why?

ans In this statement, the discoveries that Isaac Newton made or the laws and mechanisms which he understood have been represented as a curious shell or a pretty pebble. These discoveries have been called curious and pretty because they are wonderful and interesting. They have been compared to shells and pebbles because although they were very important in themselves, they were small compared to the vast 'ocean of truth'-the many things which Isaac Newton had not been able to understand.

9 .Why do you think Isaac Newton saw himself as a child in this image?

Ans .Isaac Newton saw himself as a child in this image because he felt as small, curious, wandering and excited and as inexperienced as a child compared to the vast ocean of truth that guides our universe.

10. What feelings does the statement express?

Ans .This statement expresses wonder at the workings of the world-the many laws and truths that still lie undiscovered. It expresses curiosity to know these truths. It also expresses humbleness-it shows that Isaac Newton, far from feeling proud