

Chapter 9 Intellectual Development in Infants

Section 9.1 Early Brain Development

1. Axons and dendrites, which transmit information, connect neurons. Axons transmit messages to dendrites.
2. Groups of neurons work together, controlling the way muscles work while doing an activity. After many repetitions, the neurons work together so well that it becomes easier to do the activity. Connections between neurons become part of the brain as new skills are learned or new experiences are stored as memories.
3. Answers will vary depending on the country you choose. Your report should answer the question posed and also include illustrations.
4. Multiple sclerosis is a chronic disease of the central nervous system. Symptoms may vary and may include abnormal fatigue, numbness and tingling, loss of balance and muscle coordination, slurred speech, tremors, stiffness, and bladder problems. Symptoms are caused when myelin is destroyed and replaced by scars of hardened tissues.

Section 9.2 Intellectual Development During the First Year

1. Perception is a baby's ability to learn from sensory information. Examples will vary. Possible examples include that a baby gradually learns to hold a bottle while drinking from it, or learns to push a ball.
2. Babies use their senses and their own actions to learn during the first period of development.
3. Letters will vary, but should provide a convincing argument that explains how an infant gains security, trust, and a sense of her body through a caregiver's touch. This sense is crucial to the development of motor skills.
4. Paragraphs will vary. Many non-Western cultures view a baby as an extension of the mother and feel they should spend both waking and nonwaking hours together. Sleeping with a new baby allows the mother to respond more quickly to the baby's needs.

Section 9.3 Helping Infants Learn

1. Babies communicate long before they can talk. They use movements, gestures, and different tones and patterns of crying.
2. Age appropriate describes things that are suitable for the age and individual needs of the child. Toys that are not age appropriate may not be stimulating and may be dangerous for a child.
3. Advice columns will vary. You should tell the parents that they need not worry about their daughter. Children from seven months to one year may speak one to two words. A child's first real words are usually understandable between the ages of eight and fifteen months.
4. Answers will vary based on the culture you choose. You should use vivid adjectives to describe the toys and how they are used.