Objectives
Students will
• Discuss the physical, emotional, and social changes that occur during puberty

Concepts
1. Puberty involves physical, emotional, and social changes over time.
2. Each person’s growth is different and not to be measured by norms.

Materials
• Milestones for Adolescent Development Girls and Boys
• Video Abstinence by Choice: Physical Choices and Consequences: Pregnancy (16 minutes)

Activity Choices
1. Discuss the physical changes that occur during puberty? Use the chart “Milestones for Adolescent Development.” Compare the similarities and differences in male and female.
2. Discuss the social and emotional changes that occur during puberty.
3. Show and discuss the video Physical Choices and Consequences: Pregnancy (19 minutes)
4. Exceptional Education Inclusion Activities
   A. Have student bring in pictures of themselves at different stages of life. Discuss the changes that occur as one grows.
   B. Use an overhead of the diagram and write in the labels for students with spelling difficulties to copy.

Vocabulary
1. estrogen
2. hormone
3. progesterone
4. prostate gland
5. testosterone
6. puberty
7. secondary sex characteristics
### MILESTONES OF ADOLESCENT DEVELOPMENT

#### GIRLS

<table>
<thead>
<tr>
<th>Aspects of Development</th>
<th>Age at which change usually begins</th>
<th>Age at which rapid change usually ceases</th>
<th>Description of the change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in height and weight</td>
<td>10-12</td>
<td>14-15</td>
<td>One of the earliest signs of puberty is an increase in height and weight gains. The growth spurt can last four years, but is most rapid during the first two.</td>
</tr>
<tr>
<td>Breast development</td>
<td>10-12</td>
<td>13-15</td>
<td>This stage begins with “budding,” an enlargement of the nipple and surrounding area. A year or so later the breasts will begin to enlarge.</td>
</tr>
<tr>
<td>Growth of pubic hair</td>
<td>10-11</td>
<td>14-15</td>
<td>Pubic hair first grows as light, soft hair in the external genital area. The hair darkens and covers a larger area during the next few years. Underarm hair begins to grow approximately 1-2 years after pubic hair.</td>
</tr>
<tr>
<td>Underarm hair</td>
<td>12-13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of apocrine sweat glands</td>
<td>12-13</td>
<td>15-16</td>
<td>Apocrine sweat glands become active in the underarm, in the groin and around the nipples. These glands produce a different type of sweat than other sweat glands (eccrine) that results in body odor if not regularly washed.</td>
</tr>
<tr>
<td>Onset of menstruation</td>
<td>First period (menarche) 11-14</td>
<td>Establishment of regular cycle 15-16</td>
<td></td>
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#### EMOTIONAL DEVELOPMENT: In addition to the physical changes of puberty, psychological changes also occur. These are triggered by the production of the sex hormones, estrogen and testosterone. Interest in sexuality increases. The increased production of hormones also increases natural assertiveness, somewhat explaining the tendency of teenagers to be rebellious and argumentative. Mood swings are also common during puberty.
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<td>Genital development and ejaculation</td>
<td>11-13</td>
<td>15-17</td>
<td>Hormonal activity at the start of puberty stimulates the growth of the testicles. The skin of the scrotum darkens and the penis lengthens and broadens. The ejaculation of the seminal fluid usually occurs within two years of this genital development.</td>
</tr>
<tr>
<td>Growth of body and facial hair</td>
<td>11-15</td>
<td>15-19</td>
<td>The growth of pubic hair normally starts first and is followed a year or so later by facial hair. Heredity will affect the growth of body and facial hair.</td>
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<td>Deepening of the voice</td>
<td>13-15</td>
<td>16-17</td>
<td>The voice box (larynx) begins to enlarge. An “Adam’s Apple” may develop. The voice deepens about a year after the enlargement of the larynx.</td>
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THE MALE REPRODUCTIVE SYSTEM

- vas deferens
- urinary bladder
- pubic bone
- spongy tissue
- urethra
- penis
- testis (testicle)
- scrotum
- seminal vesicle
- prostate gland
- Cowper's gland
- epididymis
- anus
- rectum
THE FEMALE REPRODUCTIVE SYSTEM

- Ovary
- Fallopian tube
- Urinary bladder
- Pubic bone
- Urethra
- Clitoris
- Vagina
- Labia
- Uterus
- Cervix
- Rectum
- Anus