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| Topic/Objectives: 14-4 Intestines; (1) Describe the role of the intestines in digestion, (2) explain how the products of digestion are absorbed. | Name: |
| | Date: |
| | Period: |

Essential Question: What role do the intestines play in the digestion and absorption of nutrients?

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| Questions: | Notes: |
| | <p>Structure of the Small Intestines</p> <ul style="list-style-type: none"> ◦ The small intestine consists of the duodenum, _____, and ileum. ◦ The small intestine is suspended from the posterior abdominal wall by a double-layered fold of peritoneum called _____. ◦ The inner wall of the small intestine is lined with finger-like intestinal _____, which greatly increase the surface area available for absorption and aid in mixing actions. ◦ Each villus contains a core of connective tissue housing blood capillaries and a lymphatic capillary called a _____. |
| | <p>Secretion of the Small Intestine</p> <ul style="list-style-type: none"> ◦ _____ secrete mucus into the small intestine. ◦ _____ at the bases of the villi secrete large amounts of watery fluid that carry digestive products into the villi. ◦ Epithelial cells of the mucosa have embedded digestive enzymes on their _____, including peptidases, sucrase, maltase, and lactase, an intestinal lipase. <p>Regulation of Small Intestinal Secretions</p> <ul style="list-style-type: none"> ◦ Mechanical and chemical stimulation from _____ causes goblet cells to secrete mucus. ◦ _____ of the intestinal wall stimulates parasympathetic reflexes that stimulate secretions from the small intestine. |
| | <p>Absorption of the Small Intestines</p> <ul style="list-style-type: none"> ◦ Monosaccharides and amino acids are absorbed into the villi and enter _____. ◦ Fatty acids dissolve into the cell membranes of the villi and are reconstructed by the cells' _____. ◦ These lipids collect in clusters that become encased in protein (_____). ◦ They are then carried away in lymphatic _____ until they eventually join the bloodstream. ◦ The intestinal villi also absorb _____ and _____. <p>Movements of the Small Intestine</p> <ul style="list-style-type: none"> ◦ The small intestine carries on _____ and _____. ◦ The ileocecal sphincter at the junction of the small and large intestines usually remains closed unless a gastroileal reflex is elicited after a _____. |

