| Unit 1: Anatomical Terminology | | | |
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| **Introduction to Anatomy** | | | |
| **3 Weeks** | | | **Assessed** |
| **Priority Standard(s)** | 9-12.LS1.A.3 | From Molecules to Organisms: Structure and Processes | |
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| **Supporting Standard(s)** | 9-12.LS1.A.2 | Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the organism system level such as nutrient uptake, water delivery, and organism movement in response to stimuli.] | |
| | 9-12.LS1.B.1 | Develop and use models to communicate the role of mitosis, cellular division, and differentiation in producing and maintaining complex organisms. [Clarification Statement: Major events of the cell cycle include cell growth, DNA replication, preparation for division, separation of chromosomes, and separation of cell contents.] | |
| | | Describe the relationships between components | |
| | | Use a model to illustrate how the interactions between systems provides specific functions in multicellular organisms | |
| | | Make a distinction between the accuracy of the model and actual body systems and functions it represents | |
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**Unit 2: Organelles and Functions**

# Cell Structure and Function

| 3 Weeks | | | Assessed |
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| **Priority Standard(s)** | 9-12.LS1.A.3 | From Molecules to Organisms: Structure and Processes | |
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| **Supporting Standard(s)** | 9-12.LS1.A.2 | Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the organism system level such as nutrient uptake, water delivery, and organism movement in response to stimuli.] | |
| | 9-12.LS1.B.1 | Develop and use models to communicate the role of mitosis, cellular division, and differentiation in producing and maintaining complex organisms. [Clarification Statement: Major events of the cell cycle include cell growth, DNA replication, preparation for division, separation of chromosomes, and separation of cell contents.] | |
| | | Describe the relationships between components | |
| | | Make a distinction between the accuracy of the model and the actual body systems and functions it represents | |
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| Unit 3: Tissue Types and Membranes | | | |
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| **Tissues** | | | |
| **3 Weeks** | | | **Assessed** |
| **Priority Standard(s)** | 9-12.LS1.A.3 | From Molecules to Organisms: Structure and Processes | |
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| **Supporting Standard(s)** | 9-12.LS1.A.2 | Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the organism system level such as nutrient uptake, water delivery, and organism movement in response to stimuli.] | |
| | 9-12.LS1.B.1 | Develop and use models to communicate the role of mitosis, cellular division, and differentiation in producing and maintaining complex organisms. [Clarification Statement: Major events of the cell cycle include cell growth, DNA replication, preparation for division, separation of chromosomes, and separation of cell contents.] | |
| | | Develop a model to identify and describe the relevant parts of body systems in multicellular organisms | |
| | | Describe the relationships between components | |
| | | Make a distinction between the accuracy of the model and the actual body systems and functions it represents | |
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| Unit 4: Integumentary Systems and Accessories | | | |
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| **Integumentary System** | | | |
| **3 Weeks** | | | **Assessed** |
| **Priority Standard(s)** | 9-12.LS1.A.3 | From Molecules to Organisms: Structure and Processes | |
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| **Supporting Standard(s)** | 9-12.LS1.A.2 | Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the organism system level such as nutrient uptake, water delivery, and organism movement in response to stimuli.] | |
| | 9-12.LS1.B.1 | Develop and use models to communicate the role of mitosis, cellular division, and differentiation in producing and maintaining complex organisms. [Clarification Statement: Major events of the cell cycle include cell growth, DNA replication, preparation for division, separation of chromosomes, and separation of cell contents.] | |
| | | Describe the relationship between components | |
| | | Make the distinction between the accuracy of the model and actual body systems and functions it represents | |
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| Unit 5: Bone formation and Skeletal Structure | | | |
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| **Skeletal System** | | | |
| **3 Weeks** | | | **Assessed** |
| **Priority Standard(s)** | 9-12.LS1.A.3 | From Molecules to Organisms: Structure and Processes | |
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| **Supporting Standard(s)** | 9-12.LS1.A.2 | Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the organism system level such as nutrient uptake, water delivery, and organism movement in response to stimuli.] | |
| | 9-12.LS1.B.1 | Develop and use models to communicate the role of mitosis, cellular division, and differentiation in producing and maintaining complex organisms. [Clarification Statement: Major events of the cell cycle include cell growth, DNA replication, preparation for division, separation of chromosomes, and separation of cell contents.] | |
| | | Develop a model to identify and describe the relevant parts of body systems in multicellular organisms | |
| | | Describe the relationships between components | |
| | | Use a model to illustrate how the interactions between systems provides specific functions in multicellular organisms | |
| | | Make a distinction between the accuracy of the model and actual body systems and functions it represents | |

| Unit 6: Muscle structure, Muscle function | | | |
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| **Muscular System** | | | |
| **3 Weeks** | | | **Assessed** |
| **Priority Standard(s)** | 9-12.LS1.A.3 | From Molecules to Organisms: Structure and Processes | |
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| **Supporting Standard(s)** | 9-12.LS1.A.2 | Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the organism system level such as nutrient uptake, water delivery, and organism movement in response to stimuli.] | |
| | 9-12.LS1.B.1 | Develop and use models to communicate the role of mitosis, cellular division, and differentiation in producing and maintaining complex organisms. [Clarification Statement: Major events of the cell cycle include cell growth, DNA replication, preparation for division, separation of chromosomes, and separation of cell contents.] | |
| | | Develop a model to identify and describe the relevant parts of body systems in multicellular organisms | |
| | | Describe the relationships between components | |
| | | Use a model to illustrate how the interactions between systems provides specific functions in multicellular organisms | |
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| Unit 7: Blood function, Nutrient transport though body | | | |
|---|---|---|---|
| **Transport System** | | | |
| **3 Weeks** | | | **Assessed** |
| **Priority Standard(s)** | 9-12.LS1.A.3 | From Molecules to Organisms: Structure and Processes | |
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| **Supporting Standard(s)** | 9-12.LS1.A.2 | Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the organism system level such as nutrient uptake, water delivery, and organism movement in response to stimuli.] | |
| | 9-12.LS1.B.1 | Develop and use models to communicate the role of mitosis, cellular division, and differentiation in producing and maintaining complex organisms. [Clarification Statement: Major events of the cell cycle include cell growth, DNA replication, preparation for division, separation of chromosomes, and separation of cell contents.] | |
| | | Describe the relationships between components | |
| | | Use a model to illustrate how the interactions between systems provides specific functions in multicellular organisms | |
| | | Make a distinction between the accuracy of the model and actual body systems and functions it represents | |
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| Unit 8: Immune reponse, relationship to circulatory system | | | |
|---|---|---|---|
| **Lymphatic System** | | | |
| **3 Weeks** | | | **Assessed** |
| **Priority Standard(s)** | 9-12.LS1.A.3 | From Molecules to Organisms: Structure and Processes | |
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| **Supporting Standard(s)** | 9-12.LS1.A.2 | Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the organism system level such as nutrient uptake, water delivery, and organism movement in response to stimuli.] | |
| | 9-12.LS1.B.1 | Develop and use models to communicate the role of mitosis, cellular division, and differentiation in producing and maintaining complex organisms. [Clarification Statement: Major events of the cell cycle include cell growth, DNA replication, preparation for division, separation of chromosomes, and separation of cell contents.] | |
| | | Develop a model to identify and describe the relevant parts of body systems in multicellular organisms | |
| | | Describe the relationships between components | |
| | | Make a distinction between the accuracy of the model and actual body systems and functions it represents | |
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| Unit 9: Brain Structure, nerve structure, nervous feedback | | | |
|---|---|---|---|
| **Nervous System** | | | |
| **3 Weeks** | | | **Assessed** |
| **Priority Standard(s)** | 9-12.LS1.A.3 | From Molecules to Organisms: Structure and Processes | |
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| **Supporting Standard(s)** | 9-12.LS1.A.2 | Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the organism system level such as nutrient uptake, water delivery, and organism movement in response to stimuli.] | |
| | 9-12.LS1.B.1 | Develop and use models to communicate the role of mitosis, cellular division, and differentiation in producing and maintaining complex organisms. [Clarification Statement: Major events of the cell cycle include cell growth, DNA replication, preparation for division, separation of chromosomes, and separation of cell contents.] | |
| | | Describe the relationships between components | |
| | | Use a model to illustrate how the interactions between systems provides specific functions in multicellular organisms | |
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| Unit 10: Eye Structure, Ear Structure, peripherla nervous system, central nervous system | | | |
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| **Senses** | | | |
| **3 Weeks** | | | **Assessed** |
| **Priority Standard(s)** | 9-12.LS1.A.3 | From Molecules to Organisms: Structure and Processes | |
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| **Supporting Standard(s)** | 9-12.LS1.A.2 | Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. [Clarification Statement: Emphasis is on functions at the organism system level such as nutrient uptake, water delivery, and organism movement in response to stimuli.] | |
| | 9-12.LS1.B.1 | Develop and use models to communicate the role of mitosis, cellular division, and differentiation in producing and maintaining complex organisms. [Clarification Statement: Major events of the cell cycle include cell growth, DNA replication, preparation for division, separation of chromosomes, and separation of cell contents.] | |
| | | Develop a model to identify and describe the relevant parts of body systems in multicellular organisms | |
| | | Describe the relationships between components | |
| | | Use a model to illustrate how the interactions between systems provides specific functions in multicellular organisms | |
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