2023-2024			
Mrs.	Schwartz		



Monday Tuesday Wednesday Thursday Friday 08/21/2023 08/22/2023 08/23/2023 08/24/2023 08/25/2023	3
---	---



Animal Science

Lesson / Instruction

Brief history of animals

Standards

AS.02.01.03.a Distinguish between animal husbandry practices that promote animal welfare and those that do not.

AS.01 Analyze historic and current trends impacting the animal systems industry.

AS.01.01 Evaluate the development and implications of animal origin,

domestication and distribution on production practices and the environment.

AS.01.01.01.a Identify and summarize the origin, significance, distribution and domestication of different animal species.

AS.01.01.01.b Evaluate and describe characteristics of animals that developed in response to the animal's environment and led to their domestication.

AS.01.01.01.c Evaluate the implications of animal adaptations on production practices and the environment.

Objectives / Essential Question

breifly describe the history of animals on the earth, list the importance time periods in

Animal Science Lesson / Instruction

Brief history of animals

Standards

AS.02.01.03.a Distinguish between animal husbandry practices that promote animal welfare and those that do not.

AS.01 Analyze historic and current trends impacting the animal systems industry.

AS.01.01 Evaluate the development and implications of animal origin, domestication and distribution on production practices and the environment.

AS.01.01.01.a Identify and summarize the origin, significance, distribution and domestication of different animal species.

AS.01.01.01.b Evaluate and describe characteristics of animals that developed in response to the animal's environment and led to their domestication.

AS.01.01.01.c Evaluate the implications of animal adaptations on production practices and the environment.

Objectives / Essential Question

breifly describe the history of animals on the earth, list the importance time periods in

Animal Science

Lesson / Instruction Brief history of animals

Standards

AS.02.01.03.a Distinguish between animal husbandry practices that promote animal welfare and those that do not.

AS.01 Analyze historic and current trends impacting the animal systems industry.

AS.01.01 Evaluate the development and implications of animal origin, domestication and distribution on production practices and the environment.

AS.01.01.01.a Identify and summarize the origin, significance, distribution and domestication of different animal species.

AS.01.01.01.b Evaluate and describe characteristics of animals that developed in response to the animal's environment and led to their domestication.

AS.01.01.01.c Evaluate the implications of animal adaptations on production practices and the environment.

Objectives / Essential Question

breifly describe the history of animals on the earth, list the importance time periods in

Animal Science

Lesson / Instruction Brief history of animals

Standards

AS.02.01.03.a Distinguish between animal husbandry practices that promote animal welfare and those that do not.

AS.01 Analyze historic and current trends impacting the animal systems industry.

AS.01.01 Evaluate the development and implications of animal origin, domestication and distribution on production practices and the environment.

AS.01.01.01.a Identify and summarize the origin, significance, distribution and domestication of different animal species.

AS.01.01.01.b Evaluate and describe characteristics of animals that developed in response to the animal's environment and led to their domestication.

AS.01.01.01.c Evaluate the implications of animal adaptations on production practices and the environment.

Objectives / Essential Question

breifly describe the history of animals on the earth, list the importance time periods in

Animal Science

Lesson / Instruction Brief history of animals

Standards

AS.02.01.03.a Distinguish between animal husbandry practices that promote animal welfare and those that do not.

AS.01 Analyze historic and current trends impacting the animal systems industry.

AS.01.01 Evaluate the development and implications of animal origin, domestication and distribution on production practices and the environment.

AS.01.01.01.a Identify and summarize the origin, significance, distribution and domestication of different animal species.

AS.01.01.01.b Evaluate and describe characteristics of animals that developed in response to the animal's environment and led to their domestication.

AS.01.01.01.c Evaluate the implications of animal adaptations on production practices and the environment.

Objectives / Essential Question

breifly describe the history of animals on the earth, list the importance time periods in



the evolution of animals, describe the theories of how animals became domesticated, describe the importance of the small animal industry, descirbe how organisms are classified, compare and contrast the Linnaeus classification system and the Woese system the evolution of animals, describe the theories of how animals became domesticated, describe the importance of the small animal industry, descirbe how organisms are classified, compare and contrast the Linnaeus classification system and the Woese system

the evolution of animals, describe the theories of how animals became domesticated, describe the importance of the small animal industry, descirbe how organisms are classified, compare and contrast the Linnaeus classification system and the Woese system the evolution of animals, describe the theories of how animals became domesticated, describe the importance of the small animal industry, descirbe how organisms are classified, compare and contrast the Linnaeus classification system and the Woese system the evolution of animals, describe the theories of how animals became domesticated, describe the importance of the small animal industry, descirbe how organisms are classified, compare and contrast the Linnaeus classification system and the Woese system



Introduction to Ag Lesson / Instruction Range Plant ID and

classification

Standards

NRS.01.02.02.b Identify herbaceous plants.

NRS.01.02.02.a Describe morphological characteristics used to identify herbaceous plants.

NRS.01.02.03.b Identify wildlife species.

NRS.02.04.04.a Identify characteristics of healthy rangeland.

NRS.02.04.04.b Identify methods of rangeland improvement.

NRS.02.04.04.c Evaluate a rangeland and develop a management plan for improvement.

NRS.02.04.05.a Identify natural resource characteristics desirable for recreational purposes.

NRS.02.06.07.a Define invasive species.

NRS.02.06.06.c Create and implement a management plan based on a population study for a community of organisms.

NRS.02.06.07.b Discuss factors that influence the

Introduction to Ag

Range Plant ID and classification

Standards

NRS.01.02.02.b Identify herbaceous plants.

NRS.01.02.02.a Describe morphological characteristics used to identify herbaceous plants.

NRS.01.02.03.b Identify wildlife species.

NRS.02.04.04.a Identify characteristics of healthy rangeland.

NRS.02.04.04.b Identify methods of rangeland improvement.

NRS.02.04.04.c Evaluate a rangeland and develop a management plan for improvement.

NRS.02.04.05.a Identify natural resource characteristics desirable for recreational purposes.

NRS.02.06.07.a Define invasive species.

NRS.02.06.06.c Create and implement a management plan based on a population study for a community of organisms.

NRS.02.06.07.b Discuss factors that influence the

Introduction to Ag

Lesson / Instruction Range Plant ID and classification

Standards NRS.01.02.02.b Identify herbaceous plants.

NRS.01.02.02.a Describe morphological characteristics used to identify herbaceous plants.

NRS.01.02.03.b Identify wildlife species.

NRS.02.04.04.a Identify characteristics of healthy rangeland.

NRS.02.04.04.b Identify methods of rangeland improvement.

NRS.02.04.04.c Evaluate a rangeland and develop a management plan for improvement.

NRS.02.04.05.a Identify natural resource characteristics desirable for recreational purposes.

NRS.02.06.07.a Define invasive species.

NRS.02.06.06.c Create and implement a management plan based on a population study for a community of organisms.

NRS.02.06.07.b Discuss factors that influence the

Introduction to Ag

Lesson / Instruction Range Plant ID and classification

Standards

NRS.01.02.02.b Identify herbaceous plants.

NRS.01.02.02.a Describe morphological characteristics used to identify herbaceous plants.

NRS.01.02.03.b Identify wildlife species.

NRS.02.04.04.a Identify characteristics of healthy rangeland.

NRS.02.04.04.b Identify methods of rangeland improvement.

NRS.02.04.04.c Evaluate a rangeland and develop a management plan for improvement.

NRS.02.04.05.a Identify natural resource characteristics desirable for recreational purposes.

NRS.02.06.07.a Define invasive species.

NRS.02.06.06.c Create and implement a management plan based on a population study for a community of organisms.

NRS.02.06.07.b Discuss factors that influence the

Introduction to Ag

Lesson / Instruction Range Plant ID and classification

Standards

NRS.01.02.02.b Identify herbaceous plants.

NRS.01.02.02.a Describe morphological characteristics used to identify herbaceous plants.

NRS.01.02.03.b Identify wildlife species.

NRS.02.04.04.a Identify characteristics of healthy rangeland.

NRS.02.04.04.b Identify methods of rangeland improvement.

NRS.02.04.04.c Evaluate a rangeland and develop a management plan for improvement.

NRS.02.04.05.a Identify natural resource characteristics desirable for recreational purposes.

NRS.02.06.07.a Define invasive species.

NRS.02.06.06.c Create and implement a management plan based on a population study for a community of organisms.

NRS.02.06.07.b Discuss factors that influence the



| establishment and spread of |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| invasive species. |
| PS.01.03.04.c Select plant |
| growth regulators to produce |
| desired responses from |
| plants. | plants. | plants. | plants. | plants. |
| PS.01.03.04.b Identify the |
| plant responses to plant |
| growth regulators and |
| different forms of tropism. |
| Homework / Evidence of |
| Learning | Learning | Learning | Learning | Learning |
| Chapter 1 in PDF handout - |
| notes | notes | notes | notes | notes |
| Quiz over chapter 1 |
| ID 10 grasses by Friday |
| Materials / Resources / |
| Technology | Technology | Technology | Technology | Technology |
| PDF Range Judging |
| Handbook | Handbook | Handbook | Handbook | Handbook |
| Paper Copy's |
| Powerpoints | Powerpoints | Powerpoints | Powerpoints | Powerpoints |
| Google Classroom material |



ant Science/Hort

Lesson / Instruction Range Plant ID and classification

Standards

NRS.01.02.02.b Identify herbaceous plants.

NRS.01.02.02.a Describe morphological characteristics used to identify herbaceous plants.

NRS.01.02.03.b Identify wildlife species.

NRS.02.04.04.a Identify characteristics of healthy rangeland.

NRS.02.04.04.b Identify methods of rangeland improvement.

NRS.02.04.04.c Evaluate a rangeland and develop a management plan for improvement.

NRS.02.04.05.a Identify natural resource characteristics desirable for recreational purposes.

NRS.02.06.07.a Define invasive species.

NRS.02.06.06.c Create and implement a management plan based on a population study for a community of organisms.

NRS.02.06.07.b Discuss factors that influence the

Plant Science/Hort Lesson / Instruction

Range Plant ID and classification

Standards

NRS.01.02.02.b Identify herbaceous plants.

NRS.01.02.02.a Describe morphological characteristics used to identify herbaceous plants.

NRS.01.02.03.b Identify wildlife species.

NRS.02.04.04.a Identify characteristics of healthy rangeland.

NRS.02.04.04.b Identify methods of rangeland improvement.

NRS.02.04.04.c Evaluate a rangeland and develop a management plan for improvement.

NRS.02.04.05.a Identify natural resource characteristics desirable for recreational purposes.

NRS.02.06.07.a Define invasive species.

NRS.02.06.06.c Create and implement a management plan based on a population study for a community of organisms.

NRS.02.06.07.b Discuss factors that influence the

Plant Science/Hort Lesson / Instruction

Range Plant ID and classification

Standards NRS.01.02.02.b Identify herbaceous plants.

NRS.01.02.02.a Describe morphological characteristics used to identify herbaceous plants.

NRS.01.02.03.b Identify wildlife species.

NRS.02.04.04.a Identify characteristics of healthy rangeland.

NRS.02.04.04.b Identify methods of rangeland improvement.

NRS.02.04.04.c Evaluate a rangeland and develop a management plan for improvement.

NRS.02.04.05.a Identify natural resource characteristics desirable for recreational purposes.

NRS.02.06.07.a Define invasive species.

NRS.02.06.06.c Create and implement a management plan based on a population study for a community of organisms.

NRS.02.06.07.b Discuss factors that influence the

ant Science/Hort

Lesson / Instruction Range Plant ID and classification

Standards

NRS.01.02.02.b Identify herbaceous plants.

NRS.01.02.02.a Describe morphological characteristics used to identify herbaceous plants.

NRS.01.02.03.b Identify wildlife species.

NRS.02.04.04.a Identify characteristics of healthy rangeland.

NRS.02.04.04.b Identify methods of rangeland improvement.

NRS.02.04.04.c Evaluate a rangeland and develop a management plan for improvement.

NRS.02.04.05.a Identify natural resource characteristics desirable for recreational purposes.

NRS.02.06.07.a Define invasive species.

NRS.02.06.06.c Create and implement a management plan based on a population study for a community of organisms.

NRS.02.06.07.b Discuss factors that influence the

Plant Science/Hort

Lesson / Instruction Range Plant ID and classification

Standards

NRS.01.02.02.b Identify herbaceous plants.

NRS.01.02.02.a Describe morphological characteristics used to identify herbaceous plants.

NRS.01.02.03.b Identify wildlife species.

NRS.02.04.04.a Identify characteristics of healthy rangeland.

NRS.02.04.04.b Identify methods of rangeland improvement.

NRS.02.04.04.c Evaluate a rangeland and develop a management plan for improvement.

NRS.02.04.05.a Identify natural resource characteristics desirable for

recreational purposes.

NRS.02.06.07.a Define invasive species.

NRS.02.06.06.c Create and implement a management plan based on a population study for a community of organisms.

NRS.02.06.07.b Discuss factors that influence the



| establishment and spread of |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| invasive species. |
| PS.01.03.04.c Select plant |
| growth regulators to produce |
| desired responses from |
| plants. | plants. | plants. | plants. | plants. |
| PS.01.03.04.b Identify the |
| plant responses to plant |
| growth regulators and |
| different forms of tropism. |
| Homework / Evidence of |
| Learning | Learning | Learning | Learning | Learning |
| Chapter 1 in PDF handout - |
| notes | notes | notes | notes | notes |
| Quiz over chapter 1 |
| ID 10 grasses by Friday |
| Materials / Resources / |
| Technology | Technology | Technology | Technology | Technology |
| PDF Range Judging |
| Handbook | Handbook | Handbook | Handbook | Handbook |
| Paper Copy's |
| Powerpoints | Powerpoints | Powerpoints | Powerpoints | Powerpoints |
| Google Classroom material |



Science 7

Introduction to Science

- Lesson / Instruction
- Section 1: The nature of science
- Key terms: Science,
- technology, law, theory
- main branches of natural science
- -learn about confirming results by designing and repeating experiments -Scientific theories and laws
- are discussed

Standards

UCP1 Systems, order, and organization

UCP2 Evidence, models, and explanation

UCP3 Change, consistency, and measurements

SAI1 Abilities to do scientific inquiry

SAI2 Understanding about scientific inquiry

ST2 Understanding about science and technology

HNS1 Science as a human endeavor

HNS2 Nature of science

HNS3 History of science

Objectives / Essential Question

How do scientists explore the world, how are the many

Science 7 Lesson / Instruction

Bellringer: Google Classroom Review "how science takes place" assign the spider map for homework The Branches of Science (text pages 7-8 teacher copy)

Standards

UCP1 Systems, order, and organization

UCP2 Evidence, models, and explanation

UCP3 Change, consistency, and measurements

SAI1 Abilities to do scientific inquiry

SAI2 Understanding about scientific inquiry

ST2 Understanding about science and technology

HNS1 Science as a human endeavor

HNS2 Nature of science

HNS3 History of science

Objectives / Essential Question

How do scientists explore the world, how are the many types of science organized, what are scientific theories and how are they differnt from scientific laws?

Homework / Evidence of Learning

Science 7

Lesson / Instruction

Bellringer: What are the three banches of science? Answer: Biological, Physical, Earth Hand in Spider diagram assignment In the "Black and Green" Everyting I Need to Know to Ace Science Study Guide students and teacher will go through chapter 1 pages 2-4. In class assignement to start on: Physical Properties: Qualitative or Quantitative. STudents will complete this assingment during class today and Thursday.

Standards

UCP1 Systems, order, and organization

UCP2 Evidence, models, and explanation

UCP3 Change, consistency, and measurements

SAI1 Abilities to do scientific inquiry

SAI2 Understanding about scientific inquiry

HNS1 Science as a human endeavor

HNS2 Nature of science

HNS3 History of science

Objectives / Essential Question

Explore more on the branches of science and how

				-
e	nı	~~	<u>۱</u>	/
		50		

Lesson / Instruction Bellringer: Google Classroom

In class assignement to start on: Physical Properties: Qualitative or Quantitative. STudents will complete this assingment during class today and Thursday.

Standards

UCP1 Systems, order, and organization

UCP2 Evidence, models, and explanation

UCP3 Change, consistency, and measurements

SAI1 Abilities to do scientific inquiry

SAI2 Understanding about scientific inquiry

HNS1 Science as a human endeavor

HNS2Nature of scienceHNS3History of science

Objectives / Essential Question

Explore more on the branches of science and how they fit together (study guide book)

Homework / Evidence of Learning Physical Properties: Qualitative or Quantitative. STudents will complete this

Science 7

Lesson / Instruction

Bellringer: Google classroomread about the Millennium Bridge on Page 11 of text. Quiz

Video: Golden Gate Bridge

Standards

UCP1 Systems, order, and organization

UCP2 Evidence, models, and explanation

UCP3 Change, consistency, and measurements

SAI1 Abilities to do scientific inquiry

SAI2 Understanding about scientific inquiry

HNS1 Science as a human endeavor

HNS2 Nature of science

HNS3 History of science

Objectives / Essential Question

How do scientists explore the world, how are the many types of science organized, what are scientific theories and how are they differnt from scientific laws?



Welding I

Lesson / Instruction

Welding Safety

Standards

PST.02.02.02.c Adjust equipment, machinery and power units for safe and efficient operation in AFNR power, structural and technical systems.

PST.04.04.01.a Compare and contrast direct and alternating current.

PST.01.02.02.a Identify the tools, machines and equipment needed to construct and/or fabricate a project in AFNR.

PST.01.02.02.c Devise and document processes to safely implement and evaluate the safe use of AFNR related tools, machinery and equipment.

PST.01.02.03.c Conduct a safety inspection of tools, machines and equipment used in different AFNR related mechanical systems.

PST.01.03 Apply physical science principles to metal fabrication using a variety of welding and cutting processes (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.01.a Compare and contrast the principles

types of science organized, what are scientific theories and how are they differnt from scientific laws?

Homework / Evidence of Learning

Binder organization: Begin to organize your science binder. Have finished by the end of this week. Spider Map: Create a spider map that explains the steps that happen when science takes place. Use the blue heads in the section as the branches of your map (see teacher example on board) Due Wednesday, 8/18 they fit together (study guide book)

Homework / Evidence of Learning

Physical Properties: Qualitative or Quantitative. STudents will complete this assingment during class today and Thursday. assingment during class today and Thursday. Due Friday, classtime

Friday - quiz over material covered this week.



Welding I

Lesson / Instruction Welding Safety

Standards

PST.02.02.02.c Adjust equipment, machinery and power units for safe and efficient operation in AFNR power, structural and technical systems.

PST.04.04.01.a Compare and contrast direct and alternating current.

PST.01.02.02.a Identify the tools, machines and equipment needed to construct and/or fabricate a project in AFNR.

PST.01.02.02.c Devise and document processes to safely implement and evaluate the safe use of AFNR related tools, machinery and equipment.

PST.01.02.03.c Conduct a safety inspection of tools, machines and equipment used in different AFNR related mechanical systems.

PST.01.03 Apply physical science principles to metal fabrication using a variety of welding and cutting processes (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.01.a Compare and contrast the principles

Welding I

Lesson / Instruction Welding Safety

Standards

PST.02.02.02.c Adjust equipment, machinery and power units for safe and efficient operation in AFNR power, structural and technical systems.

PST.04.04.01.a Compare and contrast direct and alternating current.

PST.01.02.02.a Identify the tools, machines and equipment needed to construct and/or fabricate a project in AFNR.

PST.01.02.02.c Devise and document processes to safely implement and evaluate the safe use of AFNR related tools, machinery and equipment.

PST.01.02.03.c Conduct a safety inspection of tools, machines and equipment used in different AFNR related mechanical systems.

PST.01.03 Apply physical science principles to metal fabrication using a variety of welding and cutting processes (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.01.a Compare and contrast the principles

elding I

Lesson / Instruction Welding Safety

Standards

PST.02.02.02.c Adjust equipment, machinery and power units for safe and efficient operation in AFNR power, structural and technical systems.

PST.04.04.01.a Compare and contrast direct and alternating current.

PST.01.02.02.a Identify the tools, machines and equipment needed to construct and/or fabricate a project in AFNR.

PST.01.02.02.c Devise and document processes to safely implement and evaluate the safe use of AFNR related tools, machinery and equipment.

PST.01.02.03.c Conduct a safety inspection of tools, machines and equipment used in different AFNR related mechanical systems.

PST.01.03 Apply physical science principles to metal fabrication using a variety of welding and cutting processes (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.01.a Compare and contrast the principles

Welding I

Lesson / Instruction Welding Safety

Standards

PST.02.02.02.c Adjust equipment, machinery and power units for safe and efficient operation in AFNR power, structural and technical systems.

PST.04.04.01.a Compare and contrast direct and alternating current.

PST.01.02.02.a Identify the tools, machines and equipment needed to construct and/or fabricate a project in AFNR.

PST.01.02.02.c Devise and document processes to safely implement and evaluate the safe use of AFNR related tools, machinery and equipment.

PST.01.02.03.c Conduct a safety inspection of tools, machines and equipment used in different AFNR related mechanical systems.

PST.01.03 Apply physical science principles to metal fabrication using a variety of welding and cutting processes (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.01.a Compare and contrast the principles

and procedures of different welding and cutting processes (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.01.b Analyze the situation and determine the best welding and cutting process to be used in metal fabrication.

PST.01.03.01.c Evaluate the quality of metal fabrication procedures (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.02.a Compare and contrast the properties of different metals used in AFNR power, structural and technical systems (e.g., malleability, conductivity, optical properties, chemical composition, etc.).

PST.01.03.02.b Assess and select the proper electrode for use in various shielded metal arc welding situations.

PST.01.03.02.c Construct and/or repair metal structures and equipment using metal fabrication procedures.

PST.02 Operate and maintain AFNR mechanical equipment and power systems.

PST.02.02 Operate machinery and equipment



and procedures of different welding and cutting processes (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.01.b Analyze the situation and determine the best welding and cutting process to be used in metal fabrication.

PST.01.03.01.c Evaluate the quality of metal fabrication procedures (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.02.a Compare and contrast the properties of different metals used in AFNR power, structural and technical systems (e.g., malleability, conductivity, optical properties, chemical composition, etc.).

PST.01.03.02.b Assess and select the proper electrode for use in various shielded metal arc welding situations.

PST.01.03.02.c Construct and/or repair metal structures and equipment using metal fabrication procedures.

PST.02 Operate and maintain AFNR mechanical equipment and power systems.

PST.02.02 Operate machinery and equipment

and procedures of different welding and cutting processes (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.01.b Analyze the situation and determine the best welding and cutting process to be used in metal fabrication.

PST.01.03.01.c Evaluate the quality of metal fabrication procedures (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.02.a Compare and contrast the properties of different metals used in AFNR power, structural and technical systems (e.g., malleability, conductivity, optical properties, chemical composition, etc.).

PST.01.03.02.b Assess and select the proper electrode for use in various shielded metal arc welding situations.

PST.01.03.02.c Construct and/or repair metal structures and equipment using metal fabrication procedures.

PST.02 Operate and maintain AFNR mechanical equipment and power systems.

PST.02.02 Operate machinery and equipment

and procedures of different welding and cutting processes (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.01.b Analyze the situation and determine the best welding and cutting process to be used in metal fabrication.

PST.01.03.01.c Evaluate the quality of metal fabrication procedures (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.02.a Compare and contrast the properties of different metals used in AFNR power, structural and technical systems (e.g., malleability, conductivity, optical properties, chemical composition, etc.).

PST.01.03.02.b Assess and select the proper electrode for use in various shielded metal arc welding situations.

PST.01.03.02.c Construct and/or repair metal structures and equipment using metal fabrication procedures.

PST.02 Operate and maintain AFNR mechanical equipment and power systems.

PST.02.02 Operate machinery and equipment

and procedures of different welding and cutting processes (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.01.b Analyze the situation and determine the best welding and cutting process to be used in metal fabrication.

PST.01.03.01.c Evaluate the quality of metal fabrication procedures (e.g., SMAW, GMAW, GTAW, fuel-oxygen and plasma arc torch, etc.).

PST.01.03.02.a Compare and contrast the properties of different metals used in AFNR power, structural and technical systems (e.g., malleability, conductivity, optical properties, chemical composition, etc.).

PST.01.03.02.b Assess and select the proper electrode for use in various shielded metal arc welding situations.

PST.01.03.02.c Construct and/or repair metal structures and equipment using metal fabrication procedures.

PST.02 Operate and maintain AFNR mechanical equipment and power systems.

PST.02.02 Operate machinery and equipment

while observing all safety precautions in AFNR settings.

PST.02.02.01.a Research and summarize the use of equipment, machinery and power units for AFNR power, structural and technical systems.

PST.02.02.01.c Perform preoperation inspections, startup & shut-down procedures on equipment, machinery and power units as specified in owner's manuals.

PST.02.02.02.b Apply safety principles and applicable regulations to operate equipment, machinery and power units used in AFNR power, structural and technical systems.

PST.04.02.01.b Analyze a project plan to prepare a bill of materials and an estimate of material costs.

PST.04.02.01.c Create a project cost estimate, including materials, labor and management for an AFNR structure.

Objectives / Essential Question

1. describe burns. 2. describe the dangers of three types of light pose to welding and how to protect yourself. 3. explain how to avoid eye and ear injuries. 4. select the correct



while observing all safety while observing all safety while observing all safety while observing all safety precautions in AFNR settings. precautions in AFNR settings. precautions in AFNR settings. PST.02.02.01.a Research PST.02.02.01.a Research PST.02.02.01.a Research PST.02.02.01.a Research and summarize the use of equipment, machinery and equipment, machinery and equipment, machinery and equipment, machinery and power units for AFNR power, structural and technical structural and technical structural and technical structural and technical systems. systems. systems. systems. PST.02.02.01.c Perform pre-PST.02.02.01.c Perform pre-PST.02.02.01.c Perform preoperation inspections, startoperation inspections, startoperation inspections, startoperation inspections, startup & shut-down procedures up & shut-down procedures up & shut-down procedures up & shut-down procedures on equipment, machinery and on equipment, machinery and on equipment, machinery and on equipment, machinery and power units as specified in owner's manuals. owner's manuals. owner's manuals. owner's manuals. PST.02.02.02.b Apply safety PST.02.02.02.b Apply safety PST.02.02.02.b Apply safety PST.02.02.02.b Apply safety principles and applicable principles and applicable principles and applicable principles and applicable regulations to operate regulations to operate regulations to operate regulations to operate equipment, machinery and equipment, machinery and equipment, machinery and equipment, machinery and power units used in AFNR power, structural and power, structural and power, structural and power, structural and technical systems. technical systems. technical systems. technical systems. PST.04.02.01.b Analyze a PST.04.02.01.b Analyze a PST.04.02.01.b Analyze a PST.04.02.01.b Analyze a project plan to prepare a bill of materials and an estimate of material costs. of material costs. of material costs. of material costs. PST.04.02.01.c Create a PST.04.02.01.c Create a PST.04.02.01.c Create a PST.04.02.01.c Create a project cost estimate, project cost estimate. project cost estimate, project cost estimate, including materials, labor and including materials, labor and including materials, labor and including materials, labor and management for an AFNR management for an AFNR management for an AFNR management for an AFNR structure. structure. structure. structure. **Objectives / Essential Objectives / Essential Objectives / Essential Objectives / Essential** Question Question Question Question 1. describe burns, 2. describe 1. describe burns. 2. describe 1. describe burns. 2. describe 1. describe burns. 2. describe the dangers of three types of light pose to welding and how to protect yourself. 3. explain how to avoid eye and ear injuries. 4. select the correct injuries. 4. select the correct injuries. 4. select the correct injuries. 4. select the correct

while observing all safety precautions in AFNR settings.
PST.02.02.01.a Research and summarize the use of equipment, machinery and power units for AFNR power, structural and technical systems.
PST.02.02.01.c Perform pre-

and use cylinders. 9. Discuss the danger of fire. 10. explain planned maintenance. 11. describe common hand tools. 12. discuss the types of metal

Homework / Evidence of Learning

Chapter 2 review questions due Wed. Chapter 2 study guide - Due Thursday Safety Test - Friday

Instructional Strategies

MS.SE.4 Keep feedback timely and specific.

MS.CQ.1 Pause briefly after asking a question. Doing so will increase the depth of your students' answers.

MS.SN Summarizing and Note Taking

MS.SN.3 Use teacherprepared notes.

MS.SE.5 Encourage students to lead feedback sessions.



| eye and face protection. |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| 5.describe respiratory | 5.describe respiratory | 5.describe respiratory | 5.describe respiratory |
| hazards in the shop. 6. |
| explain the purpose of MSDS |
| sheets. 7. describe work |
| clothing. 8 describe the |
| proper way to handle, store |
| and use cylinders. 9. Discuss |
| the danger of fire. 10. explain |
| planned maintenance. 11. | planned maintenance. 11. | planned maintenance. 11. | planned maintenance. 11. |
| describe common hand tools. |
| 12. discuss the types of metal |
| Homework / Evidence of |
| Learning | Learning | Learning | Learning |
| Chapter 2 review questions - |
| due Wed. | due Wed. | due Wed. | due Wed. |
| Chapter 2 study guide - Due |
| Thursday | Thursday | Thursday | Thursday |
| Safety Test - Friday |
Instructional Strategies	Instructional Strategies	Instructional Strategies	Instructional Strategies
MS.SE.4 Keep feedback	MS.CQ.1 Pause briefly after	MS.SN Summarizing and	MS.CQ.1 Pause briefly after
timely and specific.	asking a question. Doing so	Note Taking	asking a question. Doing so
MS.CQ.1 Pause briefly after	will increase the depth of your	MS.SE.4 Keep feedback	will increase the depth of your
asking a question. Doing so	students' answers.	timely and specific.	students' answers.
will increase the depth of your	MS.SN Summarizing and	MS.CQ.1 Pause briefly after	MS.SN Summarizing and
students' answers.	Note Taking	asking a question. Doing so	Note Taking
MS.SN Summarizing and	MS.SN.3 Use teacher-	will increase the depth of your	MS.SN.3 Use teacher-
Note Taking	prepared notes.	students' answers.	prepared notes.
MS.SN.3 Use teacher-	MS.SE.5 Encourage	MS.SN.3 Use teacher-	MS.SE.5 Encourage
prepared notes.	students to lead feedback	prepared notes.	students to lead feedback
MS.SE.5 Encourage	sessions.	MS.SE.5 Encourage	sessions.
students to lead feedback	MS.SE.4 Keep feedback	students to lead feedback	MS.SE.4 Keep feedback
sessions.	timely and specific.	sessions.	timely and specific.
4			