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|  | **Theme** | **Learning Target** | **Social Studies /Science Concepts**  | **Explore Now***Classroom Learning Opportunities* | **Resources** | **Travel Journal** | **Exhibit**  | **Expedition****Opportunities** |
| **1** | Unit Launch | I can define what a scientist is, what tools they use, and how they use the scientific process. | Build a foundation and introduce key vocabulary for the unit (S1CS7a)Students will develop and use science habits of mind (S1CS1a) | Pre-Assessment (Portfolio)I wonder…-A Scientist is…-Scientists Are (Types of scientists)-Scientists Use (tools)-Scientists Can (Scientific Process, Senses)Introduce Scientist of the Week- Albert Einstein | Pre- Assessment..\Unit 1 A Day in the Life of a Scientist\Weather and Water Pre Assessment.docxScientist of the Week Profiles and Pictures..\Unit 1 A Day in the Life of a Scientist\Scientist of the Month Pictures.pdf, ..\Unit 1 A Day in the Life of a Scientist\Scientist of the Month Quick Facts.pdf, ..\Unit 1 A Day in the Life of a Scientist\Banneker pic.pdf, ..\Unit 1 A Day in the Life of a Scientist\Benjamin Banneker .pdfEnd of Unit Science Fair Project Details ..\Unit 1 A Day in the Life of a Scientist\Unit 1 Project- Science Fair.pdf | What is a scientist?What does a scientist do? | Magnifying GlassPaper Mache ScientistPhotos from students acting out scientific process |  |
| **2** | Scientific Inquiry | I can use my inquiry skills to understand the scientific process. | Students will collect and use data to investigate scientific explanations (S1CS2d)Students will use tools and instruments for observing and measuring objects in scientific activities (S1CS3a, c)Students will communicate scientific ideas and activities (S1CS5a,b)Students will collect data and form a hypothesis (S1CS6b)Students will apply scientific skills through inquiry based learning investigations (S1CS7a-c) | Sink or Float InvestigationMaking Ice CreamEmory ReflectionI met a Scientist reflectionScientist of the Week- Marie Curie |  | The Scientific Method Parent Scientist Reflection- TSW journal about what they learned from meeting a scientist ..\Unit 1 A Day in the Life of a Scientist\Today I Met a Scientist.docx | Expedition photos | Emory Science LabParent Scientists |
| **3** | I am a Meteorologist/Weather Tools | I can describe what a meteorologist does.I can describe various types of weather.I can explore tools used for measuring weather.  | Identify different types of weather and the characteristics of each type. (S1E1a)Students will draw pictures to correctly portray features of what they are describing. (S1CS15b)Investigate weather by observing, measuring with simple weather instruments (thermometer, wind vane, rain gauge), and recording weather data (temperature, precipitation, sky conditions, and weather events) in a periodic journal or on a calendar seasonally. (S1E1b)Students will use tools and instruments for observing and measuring objects in scientific activities (S1CS3a, c) | Complete “What is weather?” Frayer model- Define- Weather Complete a word splash with weather vocabulary/ decorate with weather picturesObserve and record sky conditions in weather log.Explore temperature through thermometer investigation/ reflectionExplore wind through wind vane investigation/ reflectionIn school expedition reflectionScientist of the Week- Sir Isaac Newton | Messages from a Meteorologist ..\Unit 1 A Day in the Life of a Scientist\Message from a Meteorologists 1-3.docx | What does a meteorologist do?Ticket out the door- Students share one weather related experience or question they have about weather.How do meteorologists define weather?3-2-1- Students can share 3 examples of weather, 2 new things that they learned about weather, and the definition of weatherHow do meteorologists describe various types of weather?What can meteorologists observe about sky conditions? -TSW begin their 4 box graphic organizer to capture their experiences with measuring the weather. ..\Unit 1 A Day in the Life of a Scientist\I am a Meteorologist.docx, ..\Unit 1 A Day in the Life of a Scientist\I can observe.docxHow do meteorologists use tools to measure temperature?How do meteorologists use tools to measure wind direction? | Paper Mache Kids (Snow/Rain Outfits)Weather Data Project Board (collect data)Weather tools (rain gauge, wind vane, thermometer) | **Big Thinkers: Extreme Weather**orHigh Touch, High Tech: Weather or Not |
| **4** | Meteorology Tools/ Data Collection/ Types of Precipitation | I can observe and record weather data.I can describe the four types of precipitation.I can describe types of extreme weather. | Students will draw pictures to correctly portray features of what they are describing. (S1CS15b)Investigate weather by observing, measuring with simple weather instruments (thermometer, wind vane, rain gauge), and recording weather data (temperature, precipitation, sky conditions, and weather events) in a periodic journal or on a calendar seasonally. (S1E1b)Students will use tools and instruments for observing and measuring objects in scientific activities (S1CS3a, c)Students will make something (rain gauge) that can be used to perform a task (S1CS3b)Students will use simple graphs to communicate data. (S1CS5c)Identify four types of precipitation. (S1CS2b)Identify examples of extreme weather. | Create rain gauges Create weather observation logs. (On-going daily log for at least a week)Complete “Types of Precipitation” graphic organizer (rain, hail, sleet, snow).Complete a four box graphic organizer for extreme weather. (tornado, blizzard, flood, hurricane)WSBTV ReflectionScientist of the Week- Benjamin Banneker |  | How do meteorologists use tools to measure rainfall?Journal reflection- How does rain affect your everyday life? (Floods, storms, drought, plant life, animal life)How do meteorologists observe and record weather data?What are the four types of precipitation?Ticket out the door- Explain the difference between two types of precipitation.How do major weather events affect our lives? | Types of precipitation (rain, sleet, snow, hail)TornadoCanvases of precipitation | WSBTV Weather Station |
| **5** | Weather and Properties of Water | I can compare the changes in weather for each season.I can use the scientific method to investigate the properties of water.I can explain how the state of water effect its’ weight | Identify four seasons.(S1E1c)Correlate weather data (temperature, precipitation, sky conditions, and weather events) to seasonal changes (S1E1c)Students will develop and use science habits of mind (S1CS1a)Students will collect and use data to investigate scientific explanations (S1CS2d)Students will use tools and instruments for observing and measuring objects in scientific activities (S1CS3a, c)Students will identify changes in water when exploring scientific matters (S1CS4b,c)Students will communicate scientific ideas and activities (S1CS5a,b)Students will collect data and form a hypothesis (S1CS6b)Students will apply scientific skills through inquiry based learning investigations (S1CS7a-c)Students will observe and record changes in water as it relates to weather (S1E2a,c,d) | Complete flipbook about characteristics of each season.Complete seasons brochure about a favorite season.Journal reflection comparing and contrasting two seasons.Conduct the “Expanding Water” investigation.Conduct the “Ice Cube Melting” investigationConduct the “Evaporation Race” investigationConduct the “Weight of Water Freezing” investigationWeather and Water Post Assessment (Portfolio)Scientist of the Week- Jane Goodall | Water Investigations ..\Unit 1 A Day in the Life of a Scientist\hydrologyexperimentrecordingsheets.zipWeather Report Script Planning Sheet..\Unit 1 A Day in the Life of a Scientist\Weather Forecasting Planning Sheet.docxPost Assessment ..\Unit 1 A Day in the Life of a Scientist\Weather and Water Post Assessment.docx | How does weather change throughout the seasons?How can we compare and contrast weather conditions in each season?What can we observe about the changes in water (from liquid to solid)?What can we observe about the changes in water (from solid to liquid)?What can we observe about the changes in water from liquid to gas)?What happens to the weight of water before and after freezing? | Green Screen RecordingFacts on CloudsPhotos from experiments Data from experiments (Hypothesis cards, Observation Pictures, Recording sheets, etc.)Water Cycle |  |
| **6** | Properties of Light | I can use the scientific method to investigate light.I can distinguish between natural and man- made light sources.I can explain how shadows are made. | Students will investigate light. (S1P1)Recognize sources of light. (a) Explain how shadows are made. (b) | Light Pre-Assessment (Portfolio)Light Frayer ModelSources of Light/Not Sources of Light picture sortMan- made/ natural light labeling-Just Passing ThroughInvestigation-Me and My Shadow ReflectionLight Post Assessment (Portfolio)Scientist of the Week- Thomas Edison | Light Pre/ Post Assessments ..\Unit 1 A Day in the Life of a Scientist\Light Pre Assessment.doc, ..\Unit 1 A Day in the Life of a Scientist\Light Post Assessment.doc | What is light?Where does light come from? (Sources of light)..\Unit 1 A Day in the Life of a Scientist\Light sources.docxWhat is the difference between natural and man-made light?What can block light?How are shadows made? | Sources of light: light bulb, campfire, candle, sun, match, firefly, lightning, flashlight, lantern, lamp)SilhouettesLight facts on light bulbsLight interactive wall | High Touch High Tech: Me and My Shadow |
| **7** | Properties of Magnets | I can use the scientific method to investigate magnets.I can explain how magnets and attract and repel various objects.I can identify common objects that are attracted to a magnet.I can identify objects and materials that do not block magnetic force.I can explain how magnets effect other magnets. | Students will demonstrate effects of magnets on other magnets and other objects. (S1P2)Demonstrate how magnets attract and repel. (a)Identify common objects that are attracted to a magnet.(b)Identify objects and materials (air, water, wood, paper, your hand, etc.) that do not block magnetic force. (c) | Magnet Pre-Assessment (Portfolio)Kinds of magnets“Will it attract?” investigationMagnetic poles flipbookMagnetic force investigationMagnet Makers reflectionMagnet Post Assessment (Portfolio)Scientist of the Week- Lewis Latimer | Magnets Pre/ Post Assessment..\Unit 1 A Day in the Life of a Scientist\Magnets Pre Assessment.doc, ..\Unit 1 A Day in the Life of a Scientist\Magnets Post Assessment.docMagnets Mimio Presentation ..\Unit 1 A Day in the Life of a Scientist\All About Magnets.ink | What is a magnet?What can a magnet attract?What effects do magnets have on other magnets?What can block magnetic force?..\Unit 1 A Day in the Life of a Scientist\Blocking magnetic force2.pdf | Magnetic boxes to show attraction/repelMagazine cut outs of magnetic objects in our worldStudents will bring in things from home that are magnetic to glue onto our huge magnet. Students will also bring in things that are not magneticMake magnetic interactive game | Big Thinkers: Magnet Makers |
| **8** | Properties of Sound | I can use the scientific method to investigate sound.I can investigate how vibrations produce sound.I can distinguish between pitch and volume.I can identify emergency sounds that keep us safe. | Students will investigate sound. (S1P1)Investigate how vibrations produce sound. (c)Differentiate between various sounds in terms of (pitch) high or low and (volume) loud or soft. (d)Identify emergency sounds and sounds that help us stay safe. (e) | Sound Pre-Assessment (Portfolio)All About Sound (how sound works)I can sort these sounds by volumeI can sort these sounds by pitchI can identify sounds that keep me safe.Audiologist Visit ReflectionSound Post Assessment (Portfolio)Scientist of the Week- Alexander Graham Bell | Sound Pre/ Post Assessment..\Unit 1 A Day in the Life of a Scientist\Sound Pre Assessment.doc, ..\Unit 1 A Day in the Life of a Scientist\Sound Post Assessment.docSound Powerpoint Presentation ..\Unit 1 A Day in the Life of a Scientist\All About Sound.pptx | What is sound?How do we hear sound? (How the ear works)How are sounds different? (Volume)How are sounds different? (Pitch)How do sounds keep up safe? | Paper Mache earRecord sound clipsEmergency sound drawingsSound facts on earsCut out sound waves showing high pitch waves and low pitch wavesSound interactive display | High Touch High Tech “Sounds Like Fun”Or**Big Thinkers: “The Science of Sound”**Expert Visitor: Audiologist |
| **9** | Exhibit Week | Sharing our learning | Review scientific process and understanding | End of Unit WonderingsCover of Travel Journal w/ scientist/toolsScientist of the Week-Sally Ride | Unit Review Game ..\Unit 1 A Day in the Life of a Scientist\Unit 1 Jeopardy Review Game.pptx | 1) Beyond the Unit Wonderings- TSW complete the “Questions I Still Have” graphic organizer ..\Unit 1 A Day in the Life of a Scientist\Questions I still wonder about the world around me.pdf, ..\Unit 1 A Day in the Life of a Scientist\Questions I still wonder about the world around me2.pdfTravel Journal Covers..\Unit 1 A Day in the Life of a Scientist\ScienceJournalCraftivity.pdf | Rehearse with docentsHallway quotes/ labelsRecord weather reports |  |