DREAM FLIGHT ADVENTURES

Inspiring the world to think and dream

Instructor Packet

Everything you need to make the most of your Dream Flight Adventures mission

 We ignite imaginations, blur the line between entertainment and education, and let dreams take flight.

Introduction

Dream Flight Adventures is an interactive learning experience teaches **teamwork**, **critical thinking**, and **problem solving** by blending **science**, **technology**, and **engineering** with **social studies**, **humanities**, and the **arts**. In other words, it's a **real-life "Magic School Bus."** It's part simulator, part game, and part theater—and it creates an out-of-this-world experience!

The Dream Flight Adventures experience centers around an educational adventure that takes place in one of our full immersion simulators. Groups of students enter the simulator, work together to operate it, and go on incredible adventures. They travel to outer space, under the sea, back in time, through the body—anywhere their imaginations take them!

Students become the captain and crew of these simulators and must **work together** to complete their missions, and their success or failure can depend on the action of a single person. Our missions are **completely flexible and open-ended**. Students must **think creatively**, and each action can change the outcome of the mission.

Dream Flight Adventures builds upon the 20+ years of experience of the Christa McAuliffe Space Education Center, which has enriched the lives of over 300,000 children. Our missions are designed around **Common Core and state standards** by professional educators and are brimming with educational content. And the kids love them! They're often described as "better than Disneyland."

Our adventures use science fiction and fantasy contexts to expose students to **standards-based curriculum**, thought-provoking **social and ethical issues**, and crucial **21st Century skills**. These unique adventures create a strong emotional experience. This helps imbue the concepts deeply in our students' memory, so the lessons they learn remain with them for their lifetimes.

How To Use This Packet

Whether you're a frequent visitor or taking your class to Dream Flight Adventures for the first time, this packet contains all the information you'll need to make the most out of a Dream Flight Adventures mission. It includes background information about the simulator and mission, instructions to prepare your students, and a variety of lesson plans and curriculum-based activities that supplement the mission. We want your experience with Dream Flight Adventure to be unforgettable from beginning to end.

Preparation Guide & Checklist

This packet is loaded with all sorts of materials to help you integrate your Dream Flight Adventures mission seamlessly into your existing lesson plans. That said, this packet can be a little daunting at times. Please take advantage of the following checklist to make sure you and your students are fully prepared for an unforgettable experience.

Getting Started

- ☐ Review the available missions at www.dreamflightadventures.com/missions and select one that matches your curriculum or seems interesting to your students.

  Each mission has multiple curriculum touch-points. If you need help deciding which one is best for your students, please contact us via www.dreamflightadventures.com/contact. We're eager to help!

- ☐ Schedule your adventure by contacting us at www.dreamflightadventures.com/contact.

Preparing for the Adventure

- ☐ Start by reviewing the **Simulator Overview** section of this packet, which describes the simulator experience and curriculum.

- ☐ Pay particular attention to the *Student Stations* section, which describes the various roles your students will have during the adventure.

  You may consider assigning these roles to your students in advance. The *Student Stations* section includes several pointers about what type of student is most appropriate for each role. For an even richer experience, allow your students to complete the *Infinity Knights Job Application* project in the **Lesson Plans & Curriculum-based Activities** section.

- ☐ Review the *Mission Introduction* for your mission with your students. This introduction is included in the **Mission Materials** section of this packet.

  The *Pre-Mission Diary* project, included in the **Lesson Plans & Curriculum-based Activities** section of this packet, provides a great way for students to reflect on their upcoming adventure.

The "Big Day"

- ☐ Arrive on time to maximize your students' time inside their simulator adventure.
- ☐ Watch the adventure unfold. While your students are engulfed in their fully immersive adventure, you are welcome to join the Dream Flight Adventures staff behind the scenes to watch your students in action.

Aftermath

- ☐ Hold a class discussion with your students. Review how the mission relates to material you've covered in your curriculum.

  The *Mission Debrief Class Discussion Guide,* included in the **Lesson Plans & Curriculum-based Activities** section of this packet, contains several thought-provoking and mission-specific questions to help spur discussion.

- ☐ Allow your students to reflect on the adventure, record their experiences, and share what they have learned.

  The *Multimedia Mission Memoir* project, included in the **Lesson Plans & Curriculum-based Activities** section of this packet, helps students think through their mission's underlying concepts through the creative use of multimedia.

- ☐ Look ahead. Each of our missions blends a wide variety of topics. While you may have already addressed some of these topics in your lessons, others might still be down the road. Review the mission's curriculum topics and prepare to reflect back on the mission in future lessons. The curriculum topics associated with the mission are listed in the *Mission Overview*, found in the **Mission Materials** section of this packet.

Simulator Overview

A quick look at the where the magic happens

DREAM FLIGHT ADVENTURES

Inspiring the world to think and dream

Full Immersion Simulators

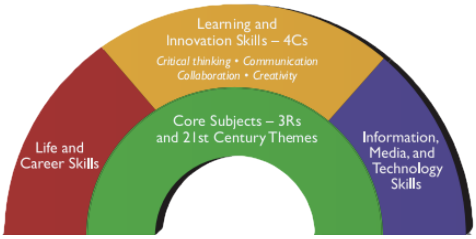
Dream Flight Adventure simulators are **immersive interactive environments** that throw students into the middle of epic stories. These stories are standards-based and built around core curriculum topics in science, social studies, technology, history, literature, and the arts.

Students become **active participants** in these stories, not passive observers. They must **learn how to operate the technology controls**, and then they must **apply that knowledge** in pursuit of their mission.

By virtue of the simulator's design, each mission—regardless of content—teaches over **forty 21st century skills**, which are organized below according to the Framework for 21st Century Learning.

Life and Career Skills

- Leadership & responsibility
- Productivity & accountability
- Cross-cultural interaction
- Initiative & self-direction
- Flexibility & adaptability
- High-stakes decision making
- Giving & following directions
- Planning
- Cost/benefit analysis
- Scarce resources & tradeoffs
- Prioritization
- Law enforcement
- Medicine
- Forensics
- Emergency response



Learning and Innovation Skills

- Critical thinking
- Problem solving
- Creativity and innovation
- Teamwork & collaboration
- Written communication
- Verbal communication
- Situational analysis
- Interpersonal relations

Information, Media, & Technology Skills

- Computers
- Music & sound
- Information literacy
- Cybersecurity
- Cryptology
- Acceleration
- Waveforms
- Additive color mixing

Core Subjects and 21st Century Themes

- Anatomy
- Immune systems
- Genetics & mutation
- Drama
- Acoustics
- Vital signs
- Navigation
- Atmospheric conditions
- Summarization

Each mission also includes its own unique curriculum aligned to Common Core and state standards. These missions all includes several relevant **STEM topics**; topics from **history, literature, and the humanities**; and thought-provoking **social or ethical issues**.

 We ignite imaginations, blur the line between entertainment and education, and let dreams take flight.

Student Stations

During a Dream Flight Adventure mission, groups of students must work together as a team to accomplish a challenging objective. Each student is assigned a station and has individual responsibility for his or her role, which contains several important tasks. Our simulators support groups of 4-16 students at a time. The stations are:

Captain

The Captain is responsible for making all command decisions and ensuring that the mission is completed successfully. The Captain also serves as the official representative of the Infinity Knights.

Embedded Concepts:
Leadership, verbal communication, high-stakes decision making, group cohesion and morale

Selection Suggestions:
The Captain should be a student who can speak clearly and think on his or her feet. Level-headed students with strong leadership skills tend to make good Captains.

First Officer

The First Officer is responsible for ensuring that the captain's orders are carried out. The First Officer will assume command in the event that the Captain is disabled.

Embedded Concepts:
Situational analysis, teamwork, leadership, summarization, oral communication, multitasking

Selection Suggestions:
The First Officer should be a student who interacts easily with his or her peers, follows directions, and exhibits strong leadership abilities. Students who pay close attention to detail tend to make good First Officers.

Second Officer

The First Officer is responsible for ensuring that the captain's orders are carried out. The First Officer will assume command in the event that the Captain is disabled.

Embedded Concepts:
Situational analysis, teamwork, leadership, summarization, oral communication, multitasking

Selection Suggestions:
The Second Officer should be a student who interacts easily with his or her peers, follows directions, and exhibits strong leadership abilities. Students who pay close attention to detail tend to make good Second Officers.

Pilot & Navigator (1 or 2 students, depending on the simulator)

The Pilot and Navigator are responsible for navigating the ship. This involves understanding the current location, charting a course to the destination, and steering the ship.

Embedded Concepts:
Cartography, 2D representations of 3D space, compass directions, velocity and inertia, acoustics

Selection Suggestions:
The Pilot should be a student with strong spacial perception skills and the ability to multitask well. Students who play video games in their spare time and have a good sense of direction tend to make effective Pilots. However, hyperactive students are **discouraged** from being Pilots.

Biologist

The Biologist is responsible for mutating and controlling the onboard Chimera, a genetically modifiable creature that can be adapted to the needs of the mission.

Embedded Concepts:
Genetics, mutation, tradeoff of scarce resources, zoology, addition and subtraction

Selection Suggestions:
The Biologist should have a relatively strong number sense. Students with a love for plants or animals tend to make good Biologists.

Physicist

The Physicist is responsible for operating the ship's Versabeam, an energy beam with several different abilities. The physicist is also in charge of strategically allocating the ship's power supply.

Embedded Concepts:
Planning, tradeoff of scarce resources, effects of radiation, multitasking

Selection Suggestions:
The Physicist should be a student with quick reaction skills and a strong understanding of cause-and-effect relationships. Students who are interested in science tend to make good Physicists.

Engineer (2x)

The Engineers are responsible for making sure that all ship systems function properly. This involves repairing damaged systems and creating ammunition for the ship's weapons and Versabeam.

Embedded Concepts:
Following instructions, pattern recognition, additive color mixing, planning, multitasking

Selection Suggestions:
The Engineers should be strong readers who are good at following directions. Students with good attention to detail and interest in mechanical processes tend to make good Engineers.

Hacker

The Hacker is responsible for hacking into enemy computers. The Hacker is also in charge of strategically allocating the ship's computer capacity.

Embedded Concepts:
Technology literacy, computer engineering, artificial intelligence, tradeoff of scarce resources

Selection Suggestions:
The Hacker should be a student who is patient and pays close attention to detail. Students interested with computers and gaming tend to make good Hackers.

Gunner

The Gunner is responsible for using the ship's weapon systems to protect the crew from threats. The Gunner is also in charge of transforming the ship into different forms, depending on the needs of the mission.

Embedded Concepts:
Planning, tradeoff of scarce resources, timing, cause and effect

Selection Suggestions:
The Gunner should be a student with quick reaction skills and a strong understanding of cause-and-effect relationships. Level-headed students tend to make good Gunners. Hyperactive or aggressive students are **discouraged** from being the Gunner.

Security Chief

The Security Chief is responsible for ship wide safety and security. This involves controlling the ship's shield, stealth, and cybersecurity systems.

Embedded Concepts:
Planning, strategic thinking, tradeoff of scarce resources, IT security, leadership

Selection Suggestions:
The Security Chief should be a student who is a good team player with leadership skills. Students who are self-starters and pay close attention to detail tend to make good Security Chiefs.

Security Guard (2x)

The Security Guards are responsible for maintaining order and safety within the ship. They defend the ship from invaders, investigate shipboard disturbances, and respond to security alerts.

Embedded Concepts:
Investigative inquiry, reporting, law enforcement, teamwork, forensics

Selection Suggestions:
The Security Guards should be students who are good at following directions and have strong writing skills. Outgoing students tend to make good Security Guards.

Doctor

The Doctor is responsible for the well-being of the crew. This involves everything from maintaining crew morale to performing emergency medical operations.

Embedded Concepts:
Human anatomy, medicine, toxins, healthcare, blood cells

Selection Suggestions:
The Doctor should be a student who is comfortable multitasking and pays close attention to detail. Students with interest in biology tend to make good Doctors.

Communications

The Communications Officer is responsible for incoming and outgoing communications, both written and verbal. This also includes decrypting encoded messages.

Embedded Concepts:
Written communication, waveform amplitude and frequency, encryption

Selection Suggestions:
The Communications officer should be a student with excellent reading and writing skills. Students with good spatial perception and a passion for reading tend to make good Communications officers.

Deck Chief

The Deck Chief is also responsible for monitoring internal and external sensors and performing detailed scans of the objects the ship encounters.

Embedded Concepts:
Forensics, 2D representations of 3D space, pressure, atmospheric conditions

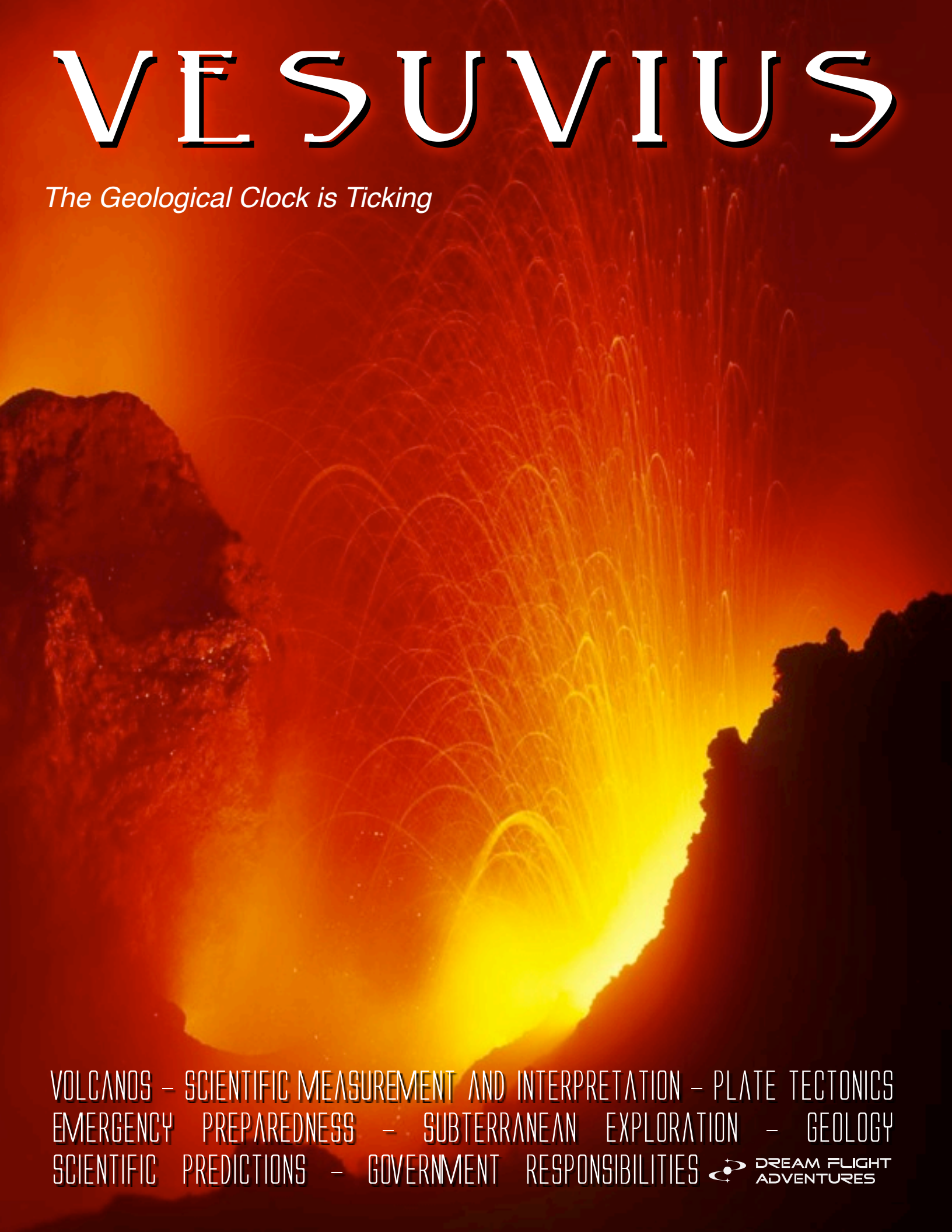
Selection Suggestions:
The Deck Chief should be a student who is comfortable multitasking and pays close attention to detail. Students with strong reading and writing skills tend to make good Deck Chiefs.

Mission Materials

Details about your specific mission

VESUVIUS

The Geological Clock is Ticking



VOLCANOS – SCIENTIFIC MEASUREMENT AND INTERPRETATION – PLATE TECTONICS
EMERGENCY PREPAREDNESS – SUBTERRANEAN EXPLORATION – GEOLOGY
SCIENTIFIC PREDICTIONS – GOVERNMENT RESPONSIBILITIES

DREAM FLIGHT ADVENTURES

VESUVIUS

Mission Overview

Krafft Island, with its fertile volcanic soil and crystal blue bays, is a luxury destination for the rich and the powerful. Everyone loves it—except for one man. Dr. Ash Tephra, the world's most renowned volcanologist, has long been outspoken against settlements on the island.

Using his own special research methods known as "underground volcanology," Dr. Tephra has warned the government that a massive eruption is about to occur and that the island must be evacuated! Fellow volcanologists using more traditional methods, however, do not agree.

A similar situation occurred two years ago. Dr. Tephra predicted an eruption of massive proportions and the island was evacuated, but the eruption never occurred. Angry citizens lodged complaints against the government for economic loss. Dr. Tephra was humiliated and his reputation took a severe hit, but now he is making the same prediction: an eruption is imminent!

The government is concerned for its citizens' safety, but even so it does not want a needless evacuation. To clear matters up the government has called upon the Infinity Knights—the renowned protectors of peace and justice throughout the universe—to help. They must travel beneath the surface of Krafft Island, explore its volcanic conduits, and determine whether an evacuation is necessary—before it's too late!

Standards-Based Curriculum

Volcanos
Scientific measurement and interpretation
Plate tectonics
Emergency preparedness
Subterranean exploration
Geology
Scientific predictions
Government responsibilities

Higher Order Thinking

How much stock should be put into scientific predictions?
When should safety concerns be allowed to disrupt daily life?
What is the value of reputation?
What natural characteristics are required for human settlements?
How can man and nature coexist?

VESUVIUS

Mission Introduction

Many years ago the Surtsey Sea frothed with fervent heat. Smoke billowed from the deep, lava spewed skyward, and a new volcanic island emerged. Now known as Krafft Island, its fertile volcanic soil and crystal blue bays attracted the rich and the powerful, becoming a luxury destination almost overnight.

It was a wonderful island. Everyone seemed content—except for one man. Dr. Ash Tephra, the world's most renowned volcanologist, was outspoken against settlements on the island from the beginning. He argued that not enough time had passed to determine how stable this volcano really was and that it was only a matter of time before the island would be engulfed in a truly formidable eruption.

Two years ago Dr. Tephra's eruption predictions reached a new extreme. Using his own special research methods known as "underground volcanology," which involve going underground to measure volcanic activity, he warned the government that a massive eruption would occur within the week! Fellow volcanologists using more traditional methods, however, did not agree.

Erring on the side of safety—and based on Dr. Tephra's impeccable reputation for accurate predictions—the government decided to evacuate the island. However, two full weeks passed and the supposed eruption never occurred. Angry citizens returned to the island lodging multiple complaints against the government for economic loss. Dr. Tephra was humiliated. His reputation took a severe hit, but he remained adamant in predicting an eruption of spectacular proportions on Krafft Island.

Today, Dr. Tephra has once again warned of an impending eruption and has urged the government to evacuate the island. The government is concerned for its citizens' safety, and Dr. Tephra remains the leading expert, but even so the government does not want another needless evacuation. Other volcanologists have once again indicated that they do not predict an eruption, but also admit that they cannot be certain Dr. Tephra is wrong. To clear matters up the government has called upon the Infinity Knights—the renowned protectors of peace and justice throughout the universe—to help them.

Your mission is to travel beneath the surface of Krafft Island, explore the volcanic conduits extensively, and determine whether an evacuation is necessary. Report your findings as soon as you can to the government—before it's too late!

Good luck!

DREAM FLIGHT ADVENTURES

Inspiring the world to think and dream

Lesson Plans & Curriculum-based Activities

Helpful tools to extend the magic before and after the mission

Name _____

Infinity Knights Job Application

In the near future you will embark on an exciting Dream Flight Adventures mission. You and your peers will become members of the *Infinity Knights*, the protectors of peace and justice throughout the universe. Together, you will operate a fantastic ship to accomplish a challenging mission. It will not be easy, and you will need to work as a team to be successful.

It is a great honor to serve with the *Infinity Knights,* and every station on your ship is important. Review the ship's stations at www.DreamFlightAdventures.com/simulators/. Pay attention to how your crew must work together and think about the stations that interest you most.

Identify the three stations where you'd most like to serve. Write a persuasive essay describing why you'd be a good choice for these positions. Describe why you are interested in the roles and how you think you would do a good job. Share how these positions relate to past experiences you've had or goals you have for the future. Use the space below or separate sheets of paper to write your persuasive essay.

_____

_____

_____

_____

_____

_____

_____

_____

_____

Name _____

Pre-Mission Diary

Read the *Mission Introduction* for your upcoming Dream Flight Adventures mission. Write a journal entry describing how you feel about the mission. What do you think it will be like? What will you do? What challenges will you face, and how do you plan on handling them? Use the space below or a separate sheet of paper if you need more room.

Pompeii - Reading Comprehension

During the *Vesuvius* simulation, students will learn about volcanoes and how they affect the society around them. Students will apply their understanding to determine whether to evacuate or not. This mission is named after the famous volcano that erupted near Pompeii in 79 A.D. Consider using the following worksheet, provided by our partners at www.insideout.net. which teaches more about this important volcano in history.

This project can be done either **before** or **after** the *Vesuvius* simulation.

Pompeii

WORKSHEET **A**

On August 23rd, 79 A.D., in a room in western Italy, Pliny the Younger was busily noting down details of the phenomenon he was witnessing across the bay from where he was staying. For the past couple of days Mount Vesuvius had been making ominous noises and issuing a black plume of smoke from the crater at its centre. This plume of smoke drifted over the town of Pompeii, which lay eight kilometres south of the foot of the mountain. The people of Pompeii were aware of the threat from the volcano and most of the 20,000 citizens were frantically packing their personal belongings and moving quickly out of town.

Pliny the Younger's uncle (Pliny the Elder) made several trips across the Bay of Naples with a flotilla of fishing boats to help those in need.

The next day, Vesuvius erupted. Pliny the Younger described the huge, dark cloud, resembling a pine tree, coming out of the mouth of the mountain (later estimated by scientists to have reached 32 km in height). After that, a cloud of ash, gas and rock poured down the sides of the mountain onto the surrounding towns and villages. As the volcano erupted, there were several earth tremors which caused the sea to be sucked away and then thrown back with force, a phenomenon known these days as a tsunami. Day turned to night and even though Pliny the Younger and the other villagers were 30 kilometres from the eruption, they were forced to flee as rock and sheets of ash fell on them. They survived but Pliny the Elder was less fortunate; overcome by carbon dioxide fumes, he died on the shores of the Bay of Naples, trying to save the lives of those trapped in the seaside towns.

More than 2,000 people from Pompeii died and in all, the disaster claimed more than 3,500 victims. Thanks to Pliny the Elder many lives were saved and thanks to Pliny the Younger a record of the entire event exists in precise detail. Nevertheless, after the dust had settled, Pompeii lay buried under 23 metres of rock and ash for more than 1,400 years, believed by all to have been lost forever.

In 1599 an architect named Fontana was digging a new course for the River Sarno when he discovered Pompeii. It is rumoured that he was so embarrassed after finding some of the famous erotic paintings that he promptly re-buried them and mentioned nothing further. It was another 150 years before any serious excavations were made at Pompeii. Some startling discoveries were made which, in 1748, German archaeologist Johann Wincklemann brought to the attention of the world. The ash that covered Pompeii had mixed with rainwater and formed a hermetic seal over it, freezing it in time. As the seal was removed, a snapshot of Roman life in the 1st century began to emerge. The mosaics, paintings and statues were perfectly preserved and even evidence of 'street' Latin was found on the city walls which, when cleaned, revealed carved graffiti. One mosaic at the entrance of a house declared 'Cave canem', which means 'Beware of the dog', while another optimistically read 'Salve lucru', meaning 'Welcome money'.

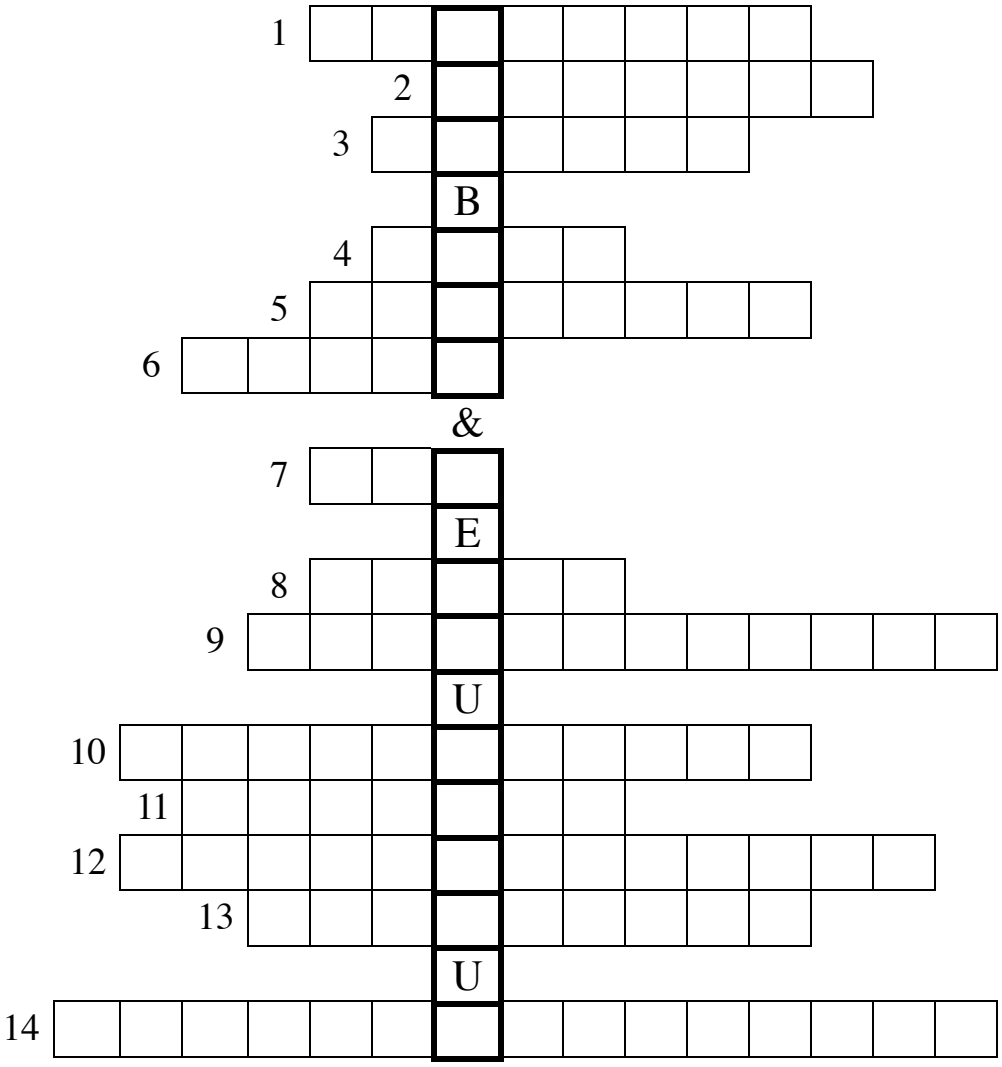
These days the foothills of Vesuvius are fertile; the famous wine Lachryma Christi is produced here. There are around three million people living in and around the area but they, like their ancestors before them, are playing a risky game. Vesuvius is not dead, it's only taking a nap. There have been more than 36 eruptions since 79 A.D., claiming many more lives. The last big eruption was in 1944 but nobody knows when the next will be.

Pompeii crossword

WORKSHEET **B**

Answer the questions. Write the answers in the crossword to complete the names of two other cities that were devastated by the eruption of the volcano.

1. What is the name of the volcano? (8)
2. What is the freak wave at sea after an earthquake known as? (7)
3. Pliny the Younger witnessed the tragedy from across the Bay of … (6)
4. The cloud from the mountain resembled which type of tree? (4)
5. What was discovered on the city walls? (8)
6. An early warning sign from the mountain was a black plume of … (5)
7. What mixed with rainwater to form a seal over Pompeii? (3)
8. What is the name of the river which runs near the site of Pompeii? (5)
9. What does 'Salve lucru' mean? (7)
10. What was the name of the archaeologist who told the world about Pompeii? (11)
11. What was the name of the architect who first found evidence of Pompeii? (7)
12. Pliny the Elder died when he was overcome by … fumes (6,7)
13. How do you say 'Beware of the dog' in Latin? (4,5)
14. What is the name of the wine produced on the lower slopes of the mountain? (8,7)



Parts of a Volcano

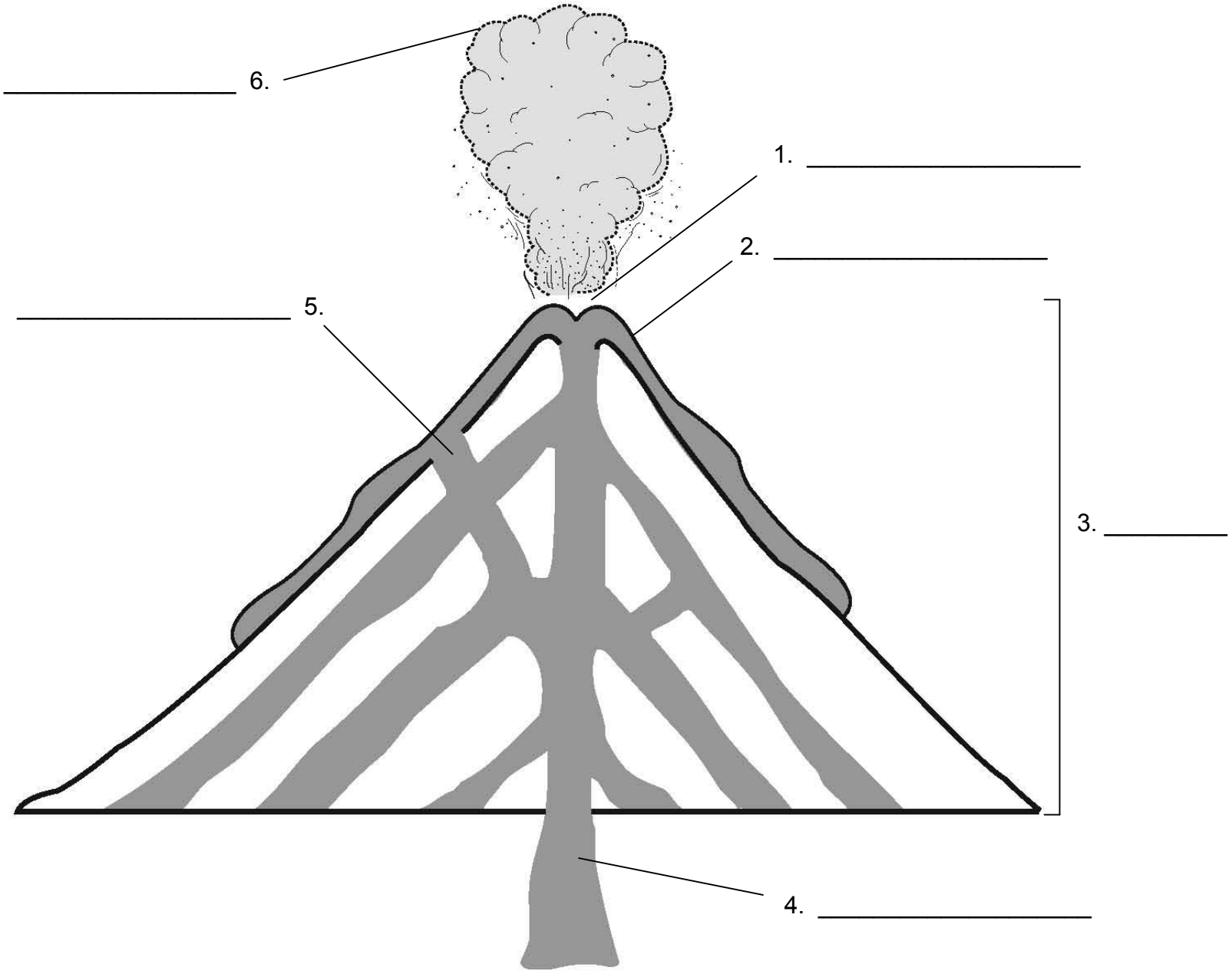
During the *Vesuvius* simulation, students will learn about volcanoes and how they affect the society around them. Consider using the following worksheet, provided by our partners at www.teachervision.com which teaches more about volcanoes in general.

This project can be done either **before** or **after** the *Vesuvius* simulation.

Name _____ Date _____

Parts of a Volcano

Directions: Use the terms in the word bank to label the parts of the volcano.

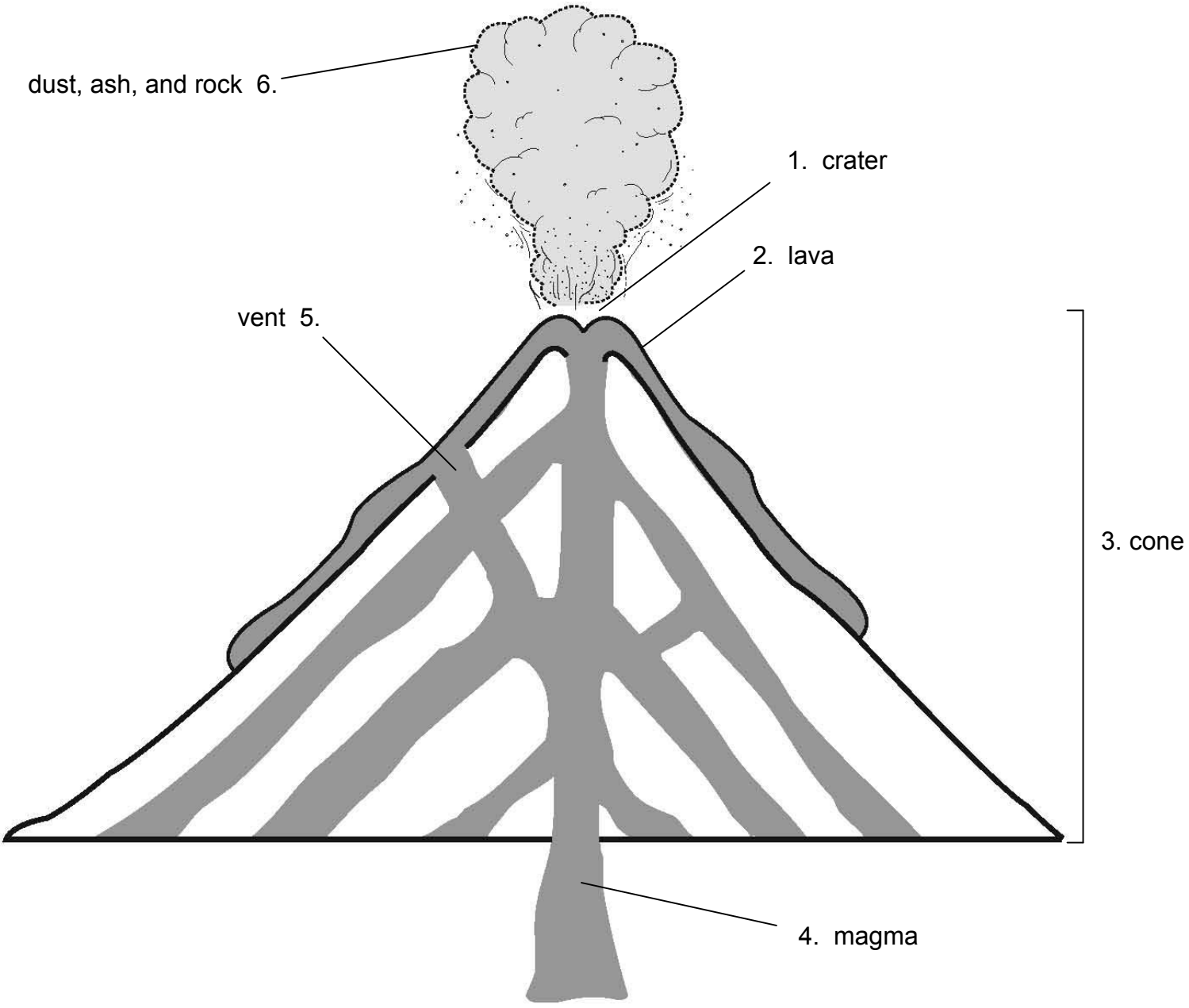


Word Bank

magma	lava	vent
crater	cone	dust, ash, and rock

Parts of a Volcano
Answer key

Volcanoes begin with a crack or a weak spot in the earth's surface. The crack reaches between 20 and 40 miles inside the earth to a pocket of melted rock called magma. This hot molten rock is slowly pushed up to the earth's surface. A volcanic cone and cup-shaped crater form at the top of the volcano. The pressure is released in a volcanic eruption. The magma, now called lava, pours from the crater. Some volcanoes throw out clouds of gas, steam, dust, ash, and rock many miles up into the atmosphere.



Mission Debrief Class Discussion Guide

Your students will encounter a wide variety of educational topics in their Dream Flight Adventures mission. After the mission is complete, use this guide to lead your students in a class discussion to explore these topics in more depth.

Consider dividing your students into small groups to discuss each question and then share their group's opinion with the entire class. Be sure to let every student's voice be heard. Dream Flight Adventure missions are multi-faceted, and each student is exposed to a slightly different part of the story. Let every student share their thoughts and experiences so the entire group can benefit.

Suggested thought-provoking questions for *Vesuvius* are:

How much stock should be put into scientific predictions?

When should safety concerns be allowed to disrupt daily life?

What is the value of reputation?

What natural characteristics are required for human settlements?

How can man and nature coexist?

If you were in Doctor Tephra's shoes and your reputation had been damaged, what would you have done?

How does the physical environment where we live affect our culture and society?

If you could do the mission again, what would you do differently?

How do you relate to the characters, events, or issues that you encountered during the mission?

What parts of the mission were the most challenging?

What new things did you learn during the experience?

Name _____

Multimedia Mission Memoir

Reflect on your recent Dream Flight Adventures mission and prepare a multimedia project that tells about your experience.

Be creative and draw upon any type of multimedia to create your project. Possible examples include posters, collages, short stories, PowerPoint presentations, dioramas, plays, podcasts, animations, videos, music, or comic books.

In your project, be sure to address the following questions:

What happened during your mission? Summarize the events.

What was your responsibility?

What did you do in your mission? What were the results?

If you could do the mission over again, what would you do differently?

How do you relate to the characters, events, or issues that you encountered during the mission?

What parts of the mission were the most challenging?

What parts of the mission were the most exciting?

What new things did you learn during the experience?

Did the mission change the way you think about anything? If so, what, and how has your perspective changed?

Be prepared to share your project with your peers and to describe why you chose the form of multimedia you did.

Enrichment Materials

Resources for deeper inquiry and advanced students

The following third-party resources are recommended as enrichment materials for gifted or advanced students.

Pompeii and Mt. Vesuvius

Videos

History.com: *Deconstructing History: Pompeii*
http://www.history.com/topics/pompeii/videos#deconstructing-history-pompeii

BBC: *Pompeii: The Mystery of People Frozen In Time*
http://www.history.com/topics/pompeii/videos#deconstructing-history-pompeii

Discovery.com*: Images from Pompeii*
http://dsc.discovery.com/tv-shows/discovery-presents/videos/understanding-volcanoes-images-from-pompeii.htm

Pompeii Videos
http://www.pompeiana.org/Resources/Pompeii_Videos.htm#TCV

A&E: *Pompeii - Buried Alive*
**can be borrowed from the Library*

Class Activities

In Old Pompeii
http://edsitement.neh.gov/lesson-plan/old-pompeii#sect-activities

Volcano Activities for Middle School
http://www.ehow.com/list_7216291_volcano-activities-middle-school.html

Additional Instructor Resources

Pro Teacher — The Eruption of Mt. Vesuvius in 79 A.D.
http://www.proteacher.com/redirect.php?goto=4723

Instructor Web — Pompeii Frozen in Time Lesson
http://www.instructorweb.com/lesson/pompeii.asp

Websites

Ancient Roman Life Preserved at Pompeii
http://science.nationalgeographic.com/science/archaeology/pompeii/

Pompeii: Portents of Disaster
http://www.bbc.co.uk/history/ancient/romans/pompeii_portents_01.shtml

Volcanoes

Videos

National Geographic: *Volcano - Nature's Inferno*
**can be borrowed from the Library*

National Geographic: *Volcanoes 101*
http://video.nationalgeographic.com/video/environment/environment-natural-disasters/volcanoes/volcanoes-101/

Class Projects

How to Make a Model Volcano
http://www.ehow.com/how_5595282_make-model-volcano.html

Additional Instructor Resources

Discovery Education — Understanding Volcanoes: Grades 6-8
http://www.discoveryeducation.com/teachers/free-lesson-plans/understanding-volcanoes.cfm

HotChalk Lesson Plans — Explorations of Volcanoes: Grades 3-5
http://lessonplanspage.com/sciencesslavolcanoesexplore35-htm/

Teacher Vision — Build a Volcano: Grades 3-6
http://www.teachervision.fen.com/chemistry/lesson-plan/335.html

Bright Hub Education — Understand How Volcanoes Form: The Basics
http://www.brighthubeducation.com/science-homework-help/5842-an-introductory-text-on-how-volcanoes-form/

Websites

Brain Pop - Volcanoes
http://www.brainpop.com/science/earthsystem/volcanoes/preview.weml

Weather Wiz Kids — Volcanoes
http://www.weatherwizkids.com/weather-volcano.htm