



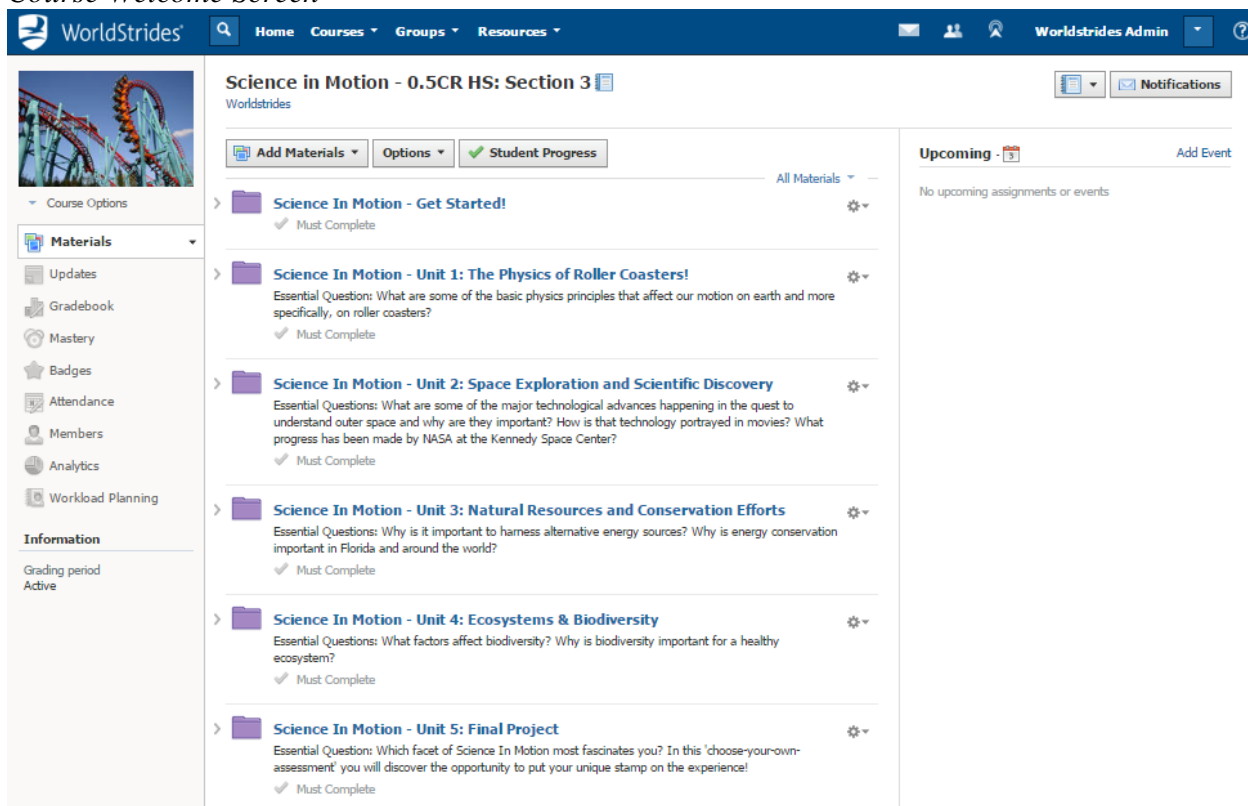
## WorldStrides Science in Motion 0.5 CR HS – Course Preview

*This resource has been prepared as a 'sneak preview' of the online course.  
Please contact the Curriculum and Academics Team at [discovery@worldstrides.org](mailto:discovery@worldstrides.org) with any questions!*

### Course Introduction/Overview

All courses open with student support about taking online courses, using internet resources responsibly, how to ask questions, and how assignments are graded. Students can message instructors directly within the learning management system and they receive personalized feedback on their work. Students can monitor their progress and access their own gradebook at any time.

### Course Welcome Screen



The screenshot shows the WorldStrides interface for a course titled "Science in Motion - 0.5CR HS: Section 3". The top navigation bar includes "Home", "Courses", "Groups", and "Resources". The main content area lists several units, each with an "Essential Question" and a "Must Complete" status:

- Science In Motion - Get Started!** (Must Complete)
- Science In Motion - Unit 1: The Physics of Roller Coasters!**  
Essential Question: What are some of the basic physics principles that affect our motion on earth and more specifically, on roller coasters? (Must Complete)
- Science In Motion - Unit 2: Space Exploration and Scientific Discovery**  
Essential Questions: What are some of the major technological advances happening in the quest to understand outer space and why are they important? How is that technology portrayed in movies? What progress has been made by NASA at the Kennedy Space Center? (Must Complete)
- Science In Motion - Unit 3: Natural Resources and Conservation Efforts**  
Essential Questions: Why is it important to harness alternative energy sources? Why is energy conservation important in Florida and around the world? (Must Complete)
- Science In Motion - Unit 4: Ecosystems & Biodiversity**  
Essential Questions: What factors affect biodiversity? Why is biodiversity important for a healthy ecosystem? (Must Complete)
- Science In Motion - Unit 5: Final Project**  
Essential Question: Which facet of Science In Motion most fascinates you? In this 'choose-your-own-assessment' you will discover the opportunity to put your unique stamp on the experience! (Must Complete)

The right sidebar shows "Upcoming" assignments or events, currently displaying "No upcoming assignments or events".

### Course Description

In this course students will explore universal laws, concepts, and theories in physics and environmental science through the lens of their personal experiences and observations on their travel program. Students reflect on concepts, issues, and interests presented during the field portion of the program. They will engage in analysis and research to deepen their experience and understanding.



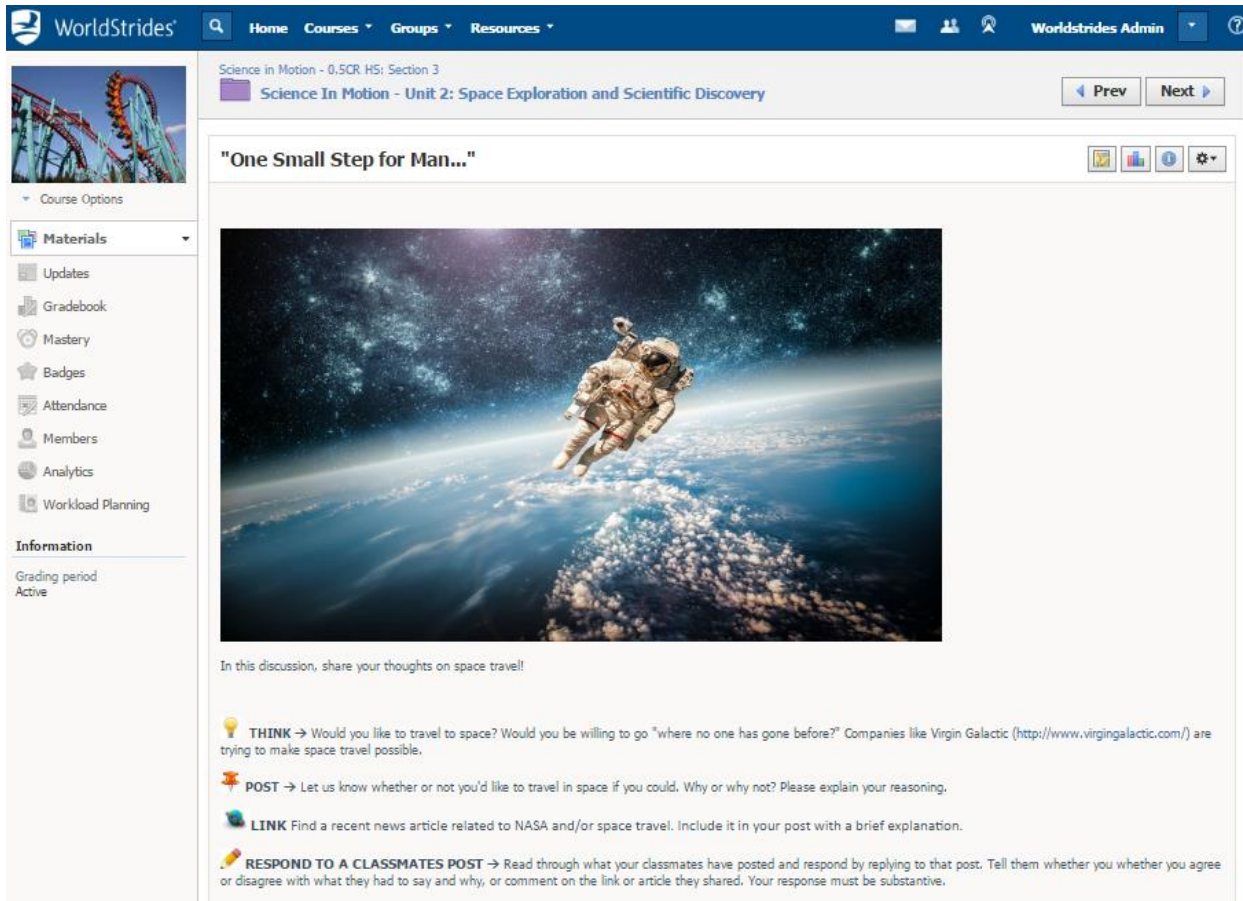
Students will investigate the role that energy plays in understanding motion, and also consider energy efficiencies, natural resources, and energy conservation. Students will examine different ecosystems and understand the importance of biodiversity.

## Course Sequence

Each unit is made up of a series of assignments that are thematically related.

The screenshot shows the WorldStrides course interface. The top navigation bar includes 'Home', 'Courses', 'Groups', and 'Resources'. The course title is 'Science In Motion - 0.SCR HS: Section 3' and the unit is 'Science In Motion - Unit 1: The Physics of Roller Coasters!'. The interface features a left sidebar with navigation options like 'Materials', 'Updates', 'Gradebook', 'Mastery', 'Badges', 'Attendance', 'Members', 'Analytics', and 'Workload Planning'. The main content area displays a list of assignments:

- What's your favorite roller coaster?**: A discussion prompt asking students to share their favorite roller coaster. It includes a 'Must post a comment/reply' requirement.
- Roller Coaster Vocabulary**: A task where students take a careful look at a diagram and roller coaster terminology, listing terms like Velocity, Acceleration, Centripetal Acceleration, Centrifugal Force, and Gravitational ... It includes a 'Must make a submission' requirement.
- Conservation of Energy**: A task with a 'Must make a submission' requirement.
- Design Your Own Roller Coaster!**: A task with a 'Must view the item' requirement.
- Design Your Own Roller Coaster!**: A task with a 'Must make a submission' requirement.

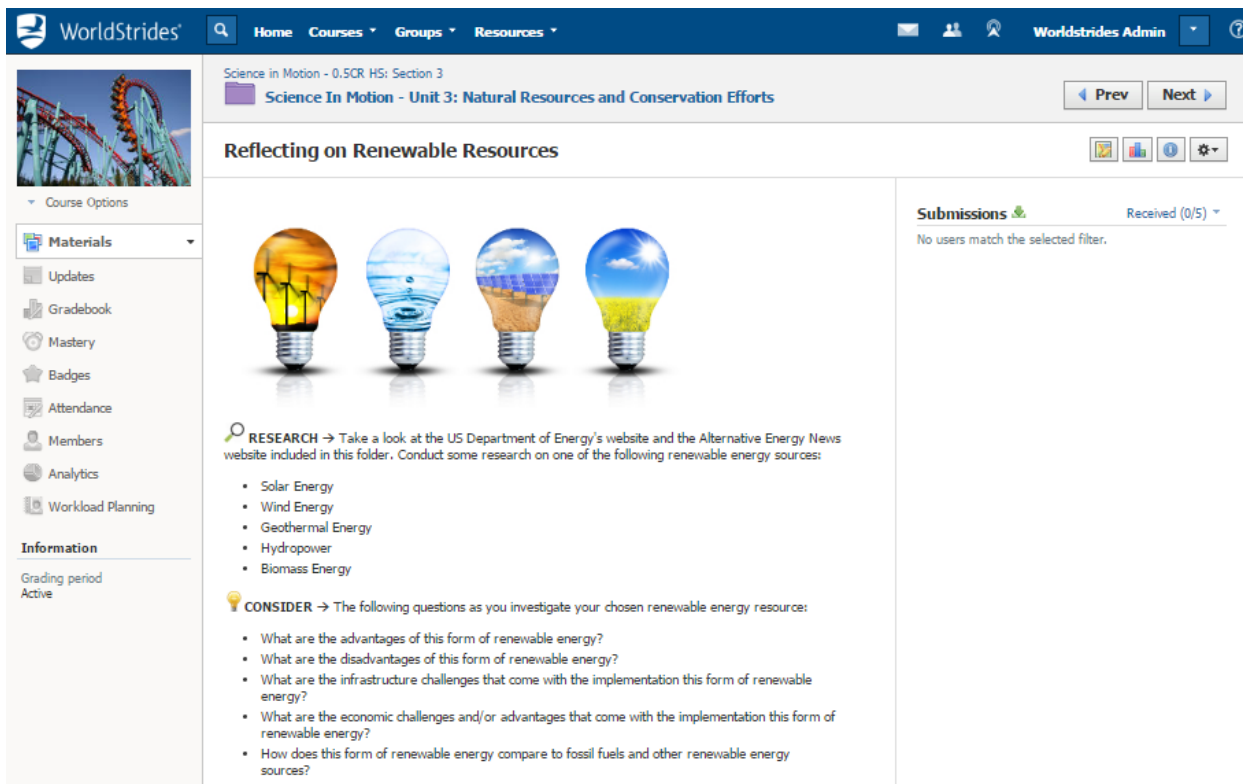


The screenshot shows the WorldStrides interface for a course titled "Science In Motion - 0.5CR HS: Section 3". The current unit is "Unit 2: Space Exploration and Scientific Discovery". The discussion board title is "One Small Step for Man...". A large image of an astronaut floating in space above Earth is displayed. Below the image, there are instructions for the discussion: "In this discussion, share your thoughts on space travel!". Four types of posts are defined: **THINK** (a question about space travel), **POST** (an opinion on space travel), **LINK** (a news article related to NASA or space travel), and **RESPOND TO A CLASSMATES POST** (a response to a classmate's post).

## Sample Online Discussion Board: Unit 2 – Space Exploration and Scientific Discovery “One Small Step for Man...”

### In this discussion, share your thoughts on space travel!

- **THINK** → Would you like to travel to space? Would you be willing to go "where no one has gone before?" Companies like Virgin Galactic are trying to make space travel possible. Did you observe any evidence of air pollution on your travel program? Be specific!
- **POST** → Let us know whether or not you'd like to travel in space if you could. Why or why not? Please explain your reasoning.
- **LINK** → Find a recent news article related to NASA and/or space travel. Include it in your post with a brief explanation.
- **RESPOND TO A CLASSMATES POST** → Read through what your classmates have posted and respond by replying to that post. Tell them whether you agree or disagree with what they had to say and why, or comment on the link or article they shared. Your response must be substantive.



The screenshot shows the WorldStrides LMS interface. At the top, there's a navigation bar with 'Home', 'Courses', 'Groups', and 'Resources'. The course title is 'Science in Motion - 0.5CR HS: Section 3' and the unit is 'Science in Motion - Unit 3: Natural Resources and Conservation Efforts'. The assignment is titled 'Reflecting on Renewable Resources'. It features four lightbulbs representing different renewable energy sources. The assignment includes a 'RESEARCH' section with a list of energy sources and a 'CONSIDER' section with a list of questions.

## Sample Assignment: Unit 3 – Natural Resources and Conservation Efforts “Reflecting on Renewable Resources”

**RESEARCH** → Take a look at the US Department of Energy's website and the Alternative Energy News website included in this folder. Conduct some research on one of the following renewable energy sources:

- Solar Energy
- Wind Energy
- Geothermal Energy
- Hydropower
- Biomass Energy

**CONSIDER** → The following questions as you investigate your chosen renewable energy resource:

- What are the advantages of this form of renewable energy?
- What are the disadvantages of this form of renewable energy?
- What are the infrastructure challenges that come with the implementation this form of renewable energy?
- What are the economic challenges and/or advantages that come with the implementation this form of renewable energy?
- How does this form of renewable energy compare to fossil fuels and other renewable energy sources?



**CHOOSE → One of the following options for this assignment:**

**Option 1:**

Create a presentation (powerpoint, Google slides, or Prezi) that effectively addresses the questions listed above.

**Option 2:**

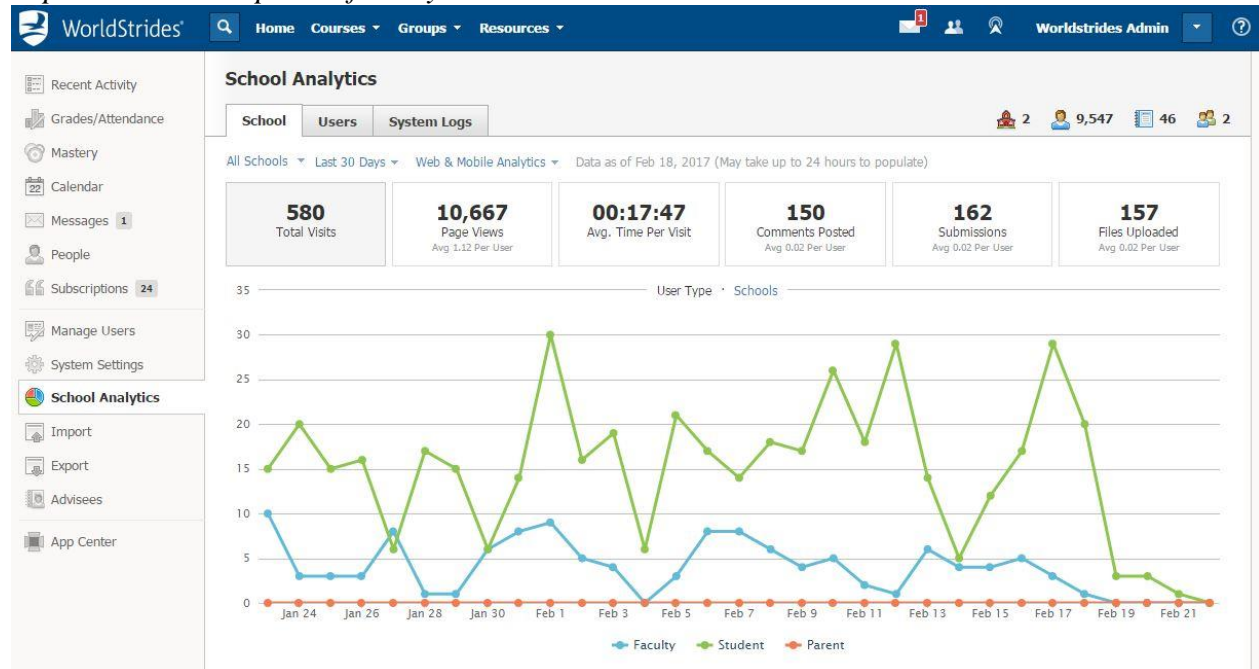
Write a well-developed, 4-5 paragraph expository essay that effectively addresses the questions listed above.

**Further Information**

*Course Analytics*

Our program’s curriculum development is anchored in data-driven continuous improvement. Our learning management system features data analytics to inform our course development process.

*Representative Snapshot of Analytics*



**Frequently Asked Questions**

**1. Is this course pass/fail or graded?**

All WorldStrides courses follow a traditional 10-point grading scale. WorldStrides Curriculum and Academics does not send transcripts to students who earn a grade below a C.

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

Grades 59 or below will result in failure.





**2. How long does it take to complete the work?**

Students are free to work at a pace that is most comfortable to them. Courses expire six months from the return date of travel.

**3. Is there a penalty if I don't finish the course?**

No worries! If a student is unable to complete the work, no grade will be assigned and no transcript will be generated.

**4. How do I ask the instructors questions?**

Students can click on the envelope at the top right corner of the learning management system to send a message to WorldStrides\_Admin. We'll respond as quickly as possible!

**Instructor Bios**

	<p>Wendy W. Amato is the VP of Curriculum and Academics at WorldStrides. She holds a Ph.D. in Curriculum and Instruction and has research interests in culturally congruent pedagogy. Dr. Amato is an International Baccalaureate certified instructor and also serves as adjunct faculty at the University of Virginia where she teaches Education Across Cultures. Her work experience includes school administration and teaching in the United States and France.</p>
	<p>Kiersten Teitelbaum serves as an Associate Director of Curriculum and Academics for WorldStrides. She holds an M. Ed. in the Social Foundations of Education and has research interests in increasing healthy eating and physical activity for at-risk students in the United States. Her background includes coaching and serving as a course facilitator in an environmental education challenge course. Ms. Teitelbaum has provided professional development to teachers in Canada, Spain, and across the United States.</p>
	<p>Carrie Weber serves as a Curriculum and Academics Specialist for WorldStrides. She holds an M. Ed. in Secondary Science Education and has taught middle school and high school students. Her research interests are focused on field experiences to facilitate better understanding of science. Ms. Weber is certified and licensed in multiple states and holds College Board AP Environmental Science certification.</p>
	<p>Randi Kessler Chapman serves as a Curriculum and Academics Specialist for WorldStrides. She holds an M.T. in Secondary English Education and BS in journalism, with an emphasis on public relations. In addition to her entrepreneurial experience launching an independent business, Ms. Chapman brings eight years of classroom teaching expertise and works tirelessly to increase the accessibility of meaningful professional development to educators around the world.</p>