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Learning Registry Overview

I/ITSEC 2011

Damon Regan, Technical Team Co-Lead
Contractor with Booz Allen Hamilton



Project Overview



The Learning Registry is a new approach to **capturing, sharing, and analyzing learning resource data** to broaden the usefulness of digital content to benefit educators and learners





Collaborators





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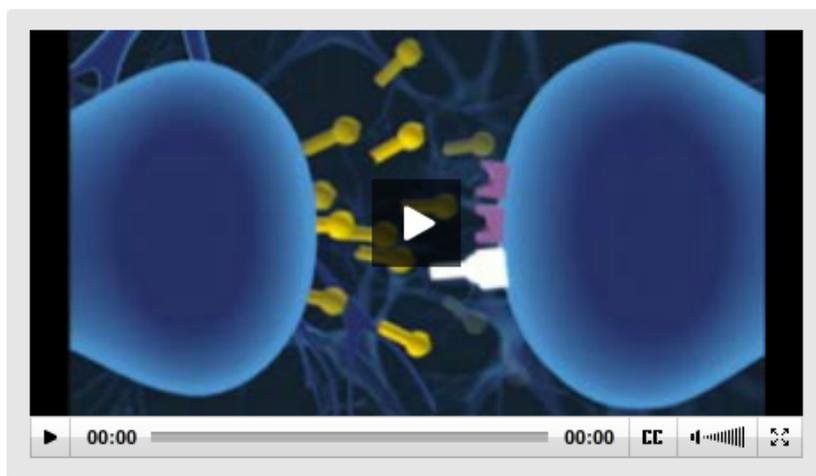
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The Science Behind Appetite

Grades 5–12

NOVA



Duration: 4m 29s

Dimensions: 320px X 240px

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This video segment, adapted from *NOVA*, documents a ballerina's experience with a potentially deadly eating disorder: anorexia nervosa. Research suggests that a brain chemical called serotonin plays a prominent role in regulating appetite—a key factor in eating disorders. The disruption of serotonin levels by dietary changes can lead to a vicious cycle that prolongs the disorder. By restoring nutrition to her diet, however, the dancer in the video is tackling her eating disorder and resuming her career.

Source: *NOVA*: "Dying to Be Thin"

This media segment was adapted from *NOVA*: "Dying to Be Thin"

Curriculum Topics

This resource is aligned to the following topics in the PBS LearningMedia curriculum framework.

- Health and Physical Education
 - Mental Illness
- Science
 - Basic Needs
 - Behavioral Response
 - Living Systems

Related Content



Body Needs
Grades 3–8
Interactive



The Role of Genetics in Obesity
Grades 6–12
Video



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Videos

NOW PLAYING

Mars Rover Power

10.19.11

Curiosity is the biggest robot explorer ever to rove Mars. How do you power something like that?



00:52 02:40

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Our current situation:
Excellent learning materials at
Disparate places with
Too little time to find them





We're often talking about the
same resource without
sharing that knowledge.

SHARE

we have the tools to
create rich usage
data...now how do we
share it?



align, etc.



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Anatomy of a Rover

Grades 3–12



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Unmanned space missions are able to explore the solar system in ways manned missions cannot. Equipped with scientific instruments such as telescopes, cameras, and spectrographs, robotic spacecraft are able to safely travel into space and radio back scientific data to researchers on Earth. In this interactive activity from NOVA, learn in greater detail how each of the Mars Exploration Rovers that arrived on the "Red Planet" in 2004 was equipped to determine, among other things, whether water ever existed there.

Source: NOVA: "Mars Dead or Alive"
This resource can be found on the NOVA: "Mars Dead or Alive" & "Welcome to Mars" Web site.

Accessibility: Full Mouse Control, No Display Transformability

👍 Recommend (0)

Also Featured In



What is a Robot?
Grades 3–12
Lesson Plan

Curriculum Topics

This resource is aligned to the following topics in the PBS LearningMedia curriculum framework.

- **Science**
 - Satellites and Space Research Technology
 - Applying the Design Process
 - History and Impact of Technology

Related Content



Mars Dead or Alive: A Hostile Environment
Grades 6–12
Video



Robotic Exploration of Space Timeline
Grades 9–12
Interactive

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Resource Information

Title Anatomy of a Rover

Link <http://www.teachersdomain.org/9-12/sci/ess/eiu/rover/index.html>

Description In this interactive activity from NOVA, learn about the sophisticated rovers that have explored Mars — Spirit and Opportunity.

Subject Keyword(s) [Science](#)

Grade Level [High School](#)

Intended Audience [Learner](#)

Resource Type [Instructional Material](#)

Resource Format [text](#), [text/html](#)

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Anatomy of a Rover

Resource for Grade 3-12 | Citation



Media Type: Interactive
Running Time: 52.2 KB
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Unmanned space missions are able to explore the solar system in ways manned missions cannot. Equipped with scientific instruments such as telescopes, cameras, and spectrophotographs, robotic spacecraft are able to safely travel into space and radio back scientific data to researchers on Earth. In this interactive activity from NOVA, learn in greater detail how each of the Mars Exploration Rovers that arrived on the "Red Planet" in 2004 was equipped to determine, among other things, whether water ever existed there.

Alternate Media Available:
[Anatomy of a Rover \(HTML version\) \(Interactive\)](#)

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Source: NOVA, "Mars Dead or Alive"
This resource can be found on the NOVA, "Mars Dead or Alive" & "Welcome to Mars" Web site.

Related Resources:

[Mars Dead or Alive: A Hostile Environment \(Video\)](#)

Resource Produced by:



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Anatomy of a Rover



Author: WGBH Educational Foundation

Subject: Science and Technology

Institution Name: Teachers Domain

Collection: [Teachers' Domain](#)

Grade Level: Primary, Secondary

Abstract: In this interactive activity from NOVA, learn about the sophisticated scientific instruments on two identical robotic rovers that have explored Mars Spirit and Opportunity.

Course Type: Learning Module

Languages: English

Material Type: Activities and Labs, Curriculum Standards

Media Format: Other, Text/HTML

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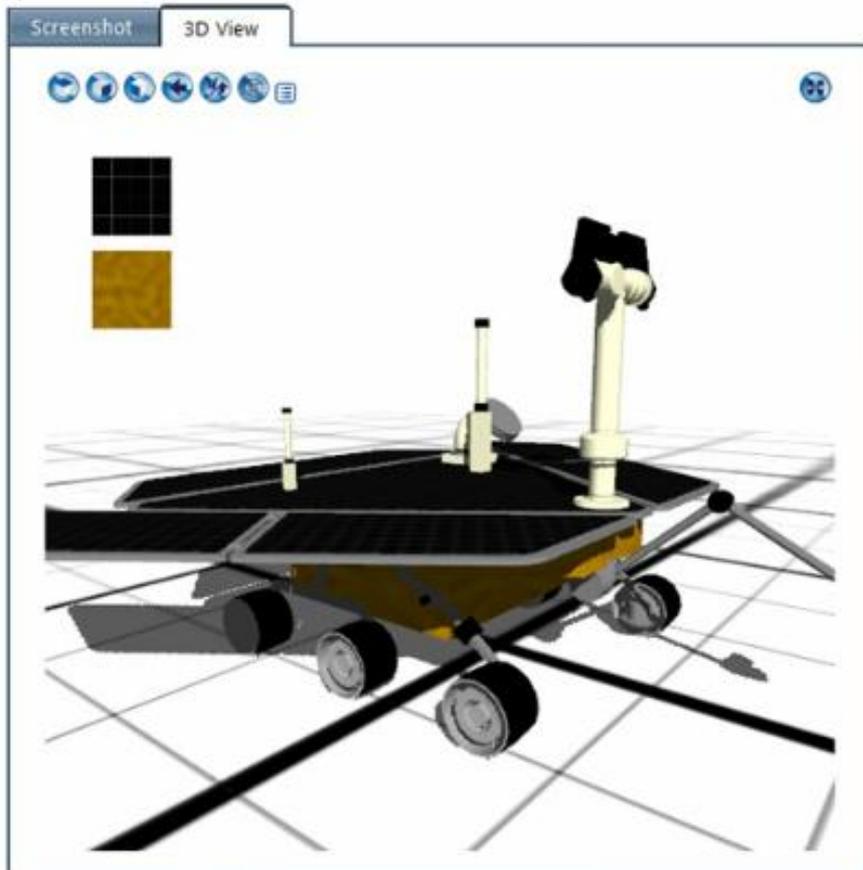
Common Core Standards

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3D Asset

Mars Rover

Opportunity, MER-B (Mars Exploration Rover – B), is a robotic rover on the planet Mars, active since 2004.



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Keywords: Mars Rover NASA Mars Exploration Rover

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Developer Information



Developer Name: ADL

Artist Name: Rob Chadwick

<http://www.adinet.gov>

Asset Details

Native format: .DAE

Number of Polygons: 11386

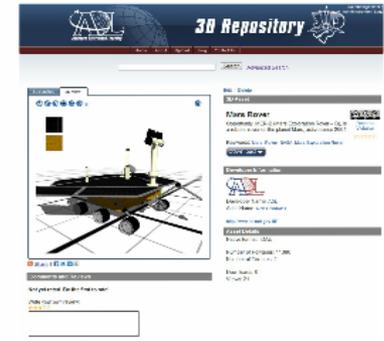
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The Learning Registry can help illuminate the "social life" of a learning resource...

*here's a
PBS
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living on ...*



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Learning Registry Suggestions

- **CACCS RST.9-10.8.** Assess the extent to which the reasoning and evidence in a text support the author's...



Anatomy of a Rover - contributed by **PBS LearningMedia**

(www.pbslearningmedia.org/content/eng06.sci.engin.design.rover/)

Matched to this common core standard on the [Agilix](#) educator portal by a verified [Science content expert](#) on August 25, 2010.

- + **CA CTE ED.D.D5.1** Understand the steps in the design process.
- + **CA CTE ED.FS.5.3** Use critical thinking skills to make informed decisions and solve problems.



All Resources

Learning Registry Recent Activity



Anatomy of a Rover incorporated into [lesson plan](#) by an Architecture and Engineering teacher.

— on [CTE Online](#), 11/01/2011



100's Day had an average rating of **3/3** from **7** users for the [OER Rubric](#) "Utility of Materials as Tools..."

— on [OER Commons](#), 10/28/2011



Surface Area and Volume favored by a teacher of **Math, grade 5**.

— on [the National Science Digital Library](#), 10/19/2011

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Linear Function Video

Jan 13

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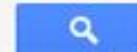
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[Illuminations: Cubes](#)

illuminations.nctm.org/activitydetail.aspx?id=6 +7

The number of unit cubes needed to fill the entire box is known as the **volume** of the box. Can you determine a rule for finding the **volume** of a box if you know its ...

[Geometry games and resources online](#)

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ethemes.missouri.edu/themes/383 +7

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interactive volume and surface area

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Standards Alignment Information by the Learning Registry

Common Core State Standards for Mathematics: 6.G.1

[1. Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.](#)

Education Level: 6

Common Core State Standards for Mathematics: 6.G.2

[2. Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas \$V = lwh\$ and \$V = bh\$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.](#)

Education Level: 6

Common Core State Standards for Mathematics: 6.G.4

[4. Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.](#)

Education Level: 6

Common Core State Standards for Mathematics: 5.MD.4

[4. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.](#)

Education Level: 5

Common Core State Standards for Mathematics: 7.G.1

[1. Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.](#)

Education Level: 7

Common Core State Standards for Mathematics: 5.MD.5.a

[a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with](#)



interactive volume and surface area

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Activity Data by the Learning Registry

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