

REM5 VR LAB PRESENTS:

IMMERSIVE LEARNING THROUGH VIRTUAL REALITY

Bringing classrooms into the 21st century.

WHY VR?

Over the last four decades, new computing platforms like the personal computer and mobile devices like tablets and smartphones have enabled new ways to engage with learners inside and outside of the classroom. At REM5 Virtual Reality Laboratory, we firmly believe virtual reality (VR) is the next generation computing platform that will change the way we communicate, work, and learn. Engaging students with VR will prepare them for the jobs of the future.

**"VIRTUAL REALITY
HAS CHANGED HOW
WE CAN TEACH"**

*Molly Rosen
St. Louis Park Middle School*

VR FOR EDUCATION

BY THE NUMBERS

- Over 400 teachers and administrators introduced to VR
 - Over 3,000 students on field trips
 - 20+ VR Camps
- Called the “best field trip ever” by students and teachers

WHO WE'VE WORKED WITH

St. Louis Park Schools | Beacon Academy | Minnetonka Schools
Groves Academy | Robinsdale Area Schools | Wayzata Public Schools
Richfield Public Schools | Edina Public Schools | Metro State
Minnesota Children's Museum | Girl and Cub Scouts
MN STEM Partnership



CONTENT BUCKETS

VR 101 | STEM | ART | ANCIENT CIVILIZATIONS INDUSTRIAL
DESIGN | MEDICAL & BIOLOGY | MUSEUMS SPACE
CLIMATE & ENVIRONMENT | MODERN HISTORY

FAQs

What ages work best for VR experiences?

- VR is great for ages 6 and up.

How much is a field trip per student?

- School groups of 12-19: \$20/each | 20-45: \$12/each.

How long is each session or field trip?

- Typically 75-120 minutes is ideal.

Can I request a custom field trip?

- Let's chat about your learning goals and we'll find something that will fit nicely!

What do the kids who aren't in VR do?

- VR is incredibly engaging even for those watching others in a headset. We design our field trips so they're engaging for everyone from start to finish. You'll be amazed at how engaged ALL of your students will be.

Do you have fun content too?

- We usually end field trips with 15-20 minutes of games and entertainment content.

Can you come to me?

- Yes! Some of our programs allow for us to bring the equipment to your school or facility.

Get in touch today and start planning your trip to REM5 VR Lab.
Email Travis Hoium at Education@REM5VR.com



FIND YOUR SUBJECT

Check out the lesson plan that aligns with your goals.

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REM5 EDUCATION VR LESSON PLAN HIGHLIGHTS

VR 101

An intro to the technology and the possibilities.

OVERVIEW: Virtual reality is confusing and complex so we'll break it down into simple to understand concepts for students to expand their understanding of virtual reality and its impact on entertainment, education, sports, travel, product design, art, and more. Learn the difference between a 3 degree of freedom (dof) headset and a 6 dof headset and learn how tracking technology works and where it's going. We'll teach students about different ways to interact and move in VR, which can make the difference between a good experience and a bad one. At the end of this field trip they'll know more about VR technology and how it works than most people in the world. No experience with VR is necessary because we'll start with the basics, including how VR works and how to properly use the equipment.

KEY CONCEPTS: VR technology, 360 video, immersive technology.

AVAILABILITY: At REM5 and off-site.

TARGET AGE: 5+

"Virtual Reality is really a new communication platform. By feeling truly present, you can share unbounded spaces and experiences with the people in your life. Imagine sharing not just moments with your friends online, but entire experiences and adventures."

– Mark Zuckerberg



STUDENTS FROM MN STEM PARTNERSHIP
TAKE A PICTURE AFTER THEIR REM5 EXPERIENCE.

STEM

A new way to learn the fundamentals.

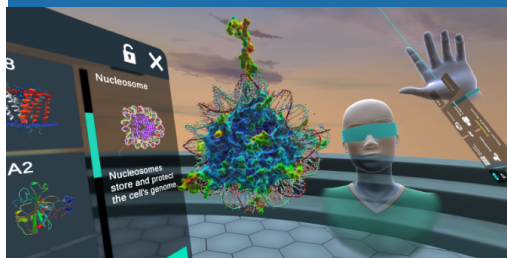
OVERVIEW: Explore an immersive way to communicate complex topics to students and engage them in a way that's not possible in the classroom. Visualize math equations, dive into chemistry virtually, and test your physics aptitude in a series of VR experiences that gamify learning. You'll be amazed at how engaged students can be in STEM topics with virtual reality.

KEY CONCEPTS: Immersive view of science concepts like chemistry and physics. Visualize mathematics like never before.

AVAILABILITY: At REM5 only.

TARGET AGE: 8+

"What if you could enter a VR environment where the molecules lie before you, obeying all the laws of molecular physics as calculated by supercomputers, and move around them in three dimensions. Now you can."
- New York Times



A ST. LOUIS PARK MIDDLE SCHOOL STUDENT
CREATES MOLECULES IN VR.

ART

No longer be bound by two dimensions.

OVERVIEW: Create your own immersive world in virtual reality with dozens of virtual paint brushes and an unlimited canvas. Whether your class is learning about new art mediums or planning an elaborate interactive world, you'll be amazed at the creativity VR can bring out in people. VR art has become one of our flagship pieces of content and is at the heart of multiple ground breaking collaborations with local businesses.

KEY CONCEPTS: Art, digital design, 3D.

AVAILABILITY: At REM5 and limited off-site.

TARGET AGE: 8+

"With VR, students interact with their work in a way not otherwise possible as it surrounds them and they can physically move through it.

- Kelli Rahn, Fine Arts Teacher, Benilde-St. Margaret's School



A HIGH SCHOOL STUDENT CREATES VIRTUAL FLORA.

REM5 EDUCATION VR LESSON PLAN HIGHLIGHTS

ANCIENT CIVILIZATIONS

Don't just read about it. Travel in time.

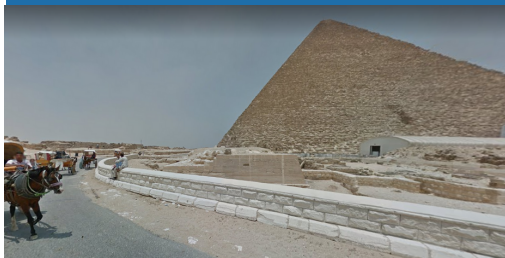
OVERVIEW: Virtual Reality provides an unprecedented ability to visualize and immerse oneself in other worlds, including those of ancient history. Using this technology, students can explore the ancient Roman Forum, the Great Pyramid of Giza, and other wonders from the ancient world. Reflect on what was lost through time and what was preserved.

KEY CONCEPTS: History, civilization, historic preservation.

AVAILABILITY: At REM5 and off-site.

TARGET AGE: 8+

"Why shouldn't people be able to teleport wherever they want?"
- Palmer Lucky, Founder of Oculus VR



THIS STUDENT HAS TRANSPORTED THEMSELVES
RIGHT TO THE GREAT PYRAMIDS.

INDUSTRIAL DESIGN

Utilize the tools that top companies use.

OVERVIEW: Use professional VR creation tools to build prototype designs in VR and export to CAD software, augmented reality, or for 3D printing. Students will design new furniture, bikes, cars, and rocket ships during this field trip. See where your student's creativity takes them with a tool that teaches valuable real world VR skills.

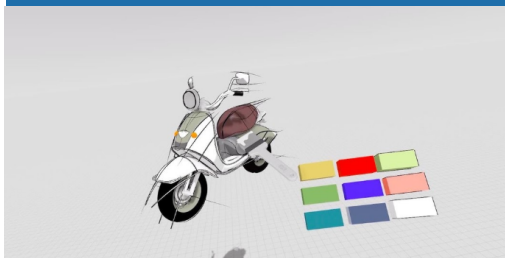
KEY CONCEPTS: Digital prototyping, collaboration, 3D modeling, CAD.

AVAILABILITY: At REM5 and limited off-site.

TARGET AGE: 8+

"It doesn't take me one and a half years anymore [to design a new car]. It takes half a year with Virtual Reality, VR goggles. This was the only way to answer the needs of our business."

- Achim Anscheidt, Bugatti's Design Director



THIS SIXTH GRADER EXAMINES A SCOOTER DESIGNED IN VR.

MEDICAL & BIOLOGY

Learn about the body from the inside.

OVERVIEW: Virtual reality provides students an incredible perspective to anatomy and advanced medical concepts. Explore the human body from the skeleton to the nervous system, travel inside a cell, and dissect an animal without the mess. Virtual reality gives a view of medical and biology concepts that are nearly impossible in the classroom or in a book.

KEY CONCEPTS: New perspective on anatomy, lessons in dissection, miniature view of cell.

AVAILABILITY: At REM5 and off-site.

TARGET AGE: 8+

"With VR providing invaluable course elements, we tutors become navigators to students, who can truly immerse themselves"
- Hung-Ming Chang, Director of the Department of Anatomy and Cell Biology, Taipei Medical University



LEARNING ANATOMY IS MUCH MORE IMMERSIVE IN VR.

REM5 EDUCATION VR LESSON PLAN HIGHLIGHTS

MUSEUM TOURS

Bringing the world's top institutes to you.

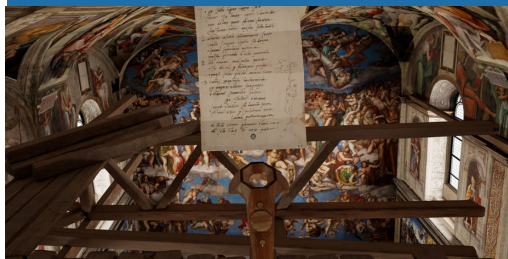
OVERVIEW: Students will explore works of art created inside and outside of VR in an experience of the highest fidelity. They'll have a chance to be completely immersed in art from Monet, Michelangelo, Leonardo Da Vinci, and more. In the Museum of Other Realities students can explore an ever changing and growing collection of a new medium of VR art. After experiencing the power of VR as a transporitive tool, students can reflect on how VR has changed the way classic and modern art is observed.

KEY CONCEPTS: Active engagement, storytelling, community experimentation, new art medium, portals to impossible scenery, eco-tourism.

AVAILABILITY: At REM5 only.

TARGET AGE: 8+

"Our mission is to preserve and bring the world's art and culture online so it's accessible to anyone, anywhere."
- Google Arts and Culture



ANY AGE CAN EXPERIENCE THE SISTINE CHAPEL FIRST HAND.

SPACE EXPLORATION

One giant leap for immersive learning.

OVERVIEW: Explore the universe the most immersive way possible without leaving the planet. Students will see a re-creation of the Apollo 11 mission, explore the International Space Station, and take a journey into a black hole. After observing the universe from an unmatched perspective, students will be able to discuss how human existence is impacting the way we observe space from earth.

KEY CONCEPTS: Transportive space travel, interactive conquest, urban astronomy.

AVAILABILITY: At REM5 and off-site.

TARGET AGE: 8+

"My spacecraft flew through the shadow of the moon and into orbital sunrise, and there it was: Earth hovering as a blue marble in the blackness of space."
- Space.com reporter after demoing VR for the first time



CHECKING OUT THE VIEW FROM THE ISS DURING OUR INNOVATION LAB.

CLIMATE AND ENVIRONMENT

Experience our changing world in a whole new way.

OVERVIEW: Virtual Reality is a pathway to some of the hardest to reach parts of the natural world. In this module, students will don headsets to go deep sea diving and reach the peak of Mt Everest, then view first-hand the impacts of climate change. After their experiences, they will be able to reflect on how virtual reality can be used to highlight environmental issues and even protect some environments with eco-tourism.

KEY CONCEPTS: Climate, environment, eco-tourism, sustainability.

AVAILABILITY: At REM5 and off-site.

TARGET AGE: 8+

"Stanford researchers have zeroed-in on Virtual Reality (VR) as a powerful tool to make abstract climate threats more visceral and personal."
- Forbes



VISIT THE TOP OF THE WORLD FROM THE COMFORT OF MINNESOTA.

MODERN HISTORY

Major moments experienced in VR.

OVERVIEW: History is filled with singular events that have sparked wars and defined eras. With virtual reality, students possess a powerful means of experiencing the stories of these events that are passed down in our cultural memory. Here they will dive into various defining moments from modern history and reflect on how those events shaped history.

KEY CONCEPTS: History, culture, story living.

AVAILABILITY: At REM5 and off-site.

TARGET AGE: 10+

"To experience this film will be to immerse oneself in a place and time, to move about a room, among the people, and sense the moment in a way never possible before virtual reality."

- The lead creator of the Anne Frank Experience



STUDENTS FROM BENILDE EXPERIENCING THE SINKING OF THE TITANIC.