MYSTICLAND IN SCHOOL

GRADE 6

GENERAL KNOWLEDGE

PROJECT GUIDE

Dear Teacher,

This is a collection of five interesting projects with respective rubrics that can be given out to learners during their MysticLand General Knowledge programme. They have been put together under the guidelines of NEP 2020.

Please note that projects are not compulsory for completion of the course. If as a school, your preference is to conduct test-based assessments, question banks are a part of your Teacher Tools Google Folder. If you would prefer a project-based assessment, this guide will be useful.

PROJECT TITLES FOR GRADE 6

1. **The Time-Travelling Continent** (Research-Based and Creative)
2. **Ancient Insects Trapped in Time** (Research-Based)
3. **Inventor for a Day – Design a Futuristic Gadget!** (Creative and Hands-on Activity)
4. **The Secret Behind Famous Paintings!** (Research-Based, Creative, and Hands-on Activity)
5. **The Rise of Indian Startups** (Research-Based and Creative)

Project Title #1: The Time-Travelling Continent

Chapter: The beginning of Earth

Project Type

☐ Hands-on Activity ☑ Research-Based ☑ Creative

Objective

Students will explore how Earth's continents have changed over millions of years and predict what they might look like in the future!

Instructions

Introduction:

- Did you know that the continents were once all joined together as a supercontinent called Pangaea? And they are still moving!
- Scientists predict that in 250 million years, the continents will form another supercontinent.

Task:

- Take chart papers and a world map.

- Research and create a before-and-after map showing:
  - ✔ Pangaea – What the continents looked like 250 million years ago
  - ✔ Present-day continents – What we see today
  - ✔ Future continents – A prediction of what they might look like.
  - ✔ Explain in brief how the continents changed over time.

- Bonus activity: Find out which Indian landmass was once a separate island before joining Asia (hint: it caused the Himalayas to form!)

Materials Needed:

- Chart paper (for drawing past and future continents)
- World map (for present-day continents)
- Coloured pencils, markers

Research Pointers:

- What evidence do scientists use to prove continents are moving?
- How fast do continents move?
- What could future continents look like?

Creative Guidelines:

- Label the continents on the map
- You can highlight major events on the map (eg, Himalayas forming)

Expected Outcome

A before-and-after world map showing continental drift, with explanations of the changes.

Evaluation Criteria

- ✔ Scientific accuracy and research
- ✔ Creativity in map design
- ✔ Clarity of explanation

Submission Format

- ✔ A visual map with written explanations

Project Title #2: Ancient Insects Trapped in Time

Chapter: All about palaeontology + unusual animals and insects

Project Type

☐ Hands-on Activity ☑ Research-Based ☐ Creative

Objective

Students will explore how insects have remained unchanged for millions of years and how we find them preserved in amber, a fossilised tree resin.

Instructions

Introduction:

- Imagine looking at an insect that lived 100 million years ago, perfectly preserved as if frozen in time.
- Amber fossils provide us with a window into prehistoric life, helping scientists understand extinct species and their environments.
- Some insects, like dragonflies and cockroaches, have barely changed in millions of years—earning them the title of "living fossils"!

Task:

- Research and write a report on an ancient insect found in amber. You may choose from:
  - ✔ Prehistoric mosquitoes
  - ✔ Ancient termites
  - ✔ Giant prehistoric ants
  - ✔ Prehistoric bees
  - ✔ Mystery insects found in amber
- Your report should include:
  - ✔ Name of the insect and when it lived
  - ✔ How it got trapped in amber
  - ✔ Where amber fossils of this insect have been found (India, Myanmar, Dominican Republic, etc.)
  - ✔ What this fossil teaches scientists about prehistoric ecosystems
  - ✔ A fun fact or mystery about this insect

Materials Needed:

- Chart paper/booklet for research presentation
- Coloured markers, pens for diagrams
- Printed images of amber fossils
- Glue and pair of scissors

Research Pointers:

- What makes amber so special for preserving ancient life?
- What was the world like when this insect lived?
- Have scientists ever found anything unusual in amber? (eg, dinosaur feathers, tiny prehistoric lizards)
- How are amber fossils different from other fossils like bones or imprints?

Creative Guidelines:

- Present your findings in an illustrated “Fossil Case File” chart paper or booklet.
- Highlight key details with labels and timelines.
- Make the case file fun and colourful.

Expected Outcome
A detailed scientific report explaining an ancient insect fossil, amber preservation, and its significance in understanding Earth's past.

Evaluation Criteria
- ✔ Depth of research and factual accuracy
- ✔ Presentation and organisation
- ✔ Creativity in visuals and explanations

Submission Format
- ✔ A visual map with written explanations

Project Title #3: Inventor for a Day – Design a Futuristic Gadget!

Chapter: The what, why, and how of inventions

Project Type

☑ Hands-on Activity ☐ Research-Based ☑ Creative

Objective
Students will use their creativity to design a futuristic invention that solves a real-world problem.

Instructions

Introduction:
- Many of today's inventions started as crazy ideas!
- What if you could create something completely new—a gadget that doesn't exist yet?

Task:
- Research a real-world problem (eg, pollution, food waste, lack of clean water).
- Design a new invention that helps solve this problem.
- Create an invention blueprint showing:
  - ✔ What your invention looks like
  - ✔ How it works
  - ✔ What problem it solves
  - ✔ What materials it is made of
- Bonus Activity: Make a mini prototype using craft materials or household objects!

Materials Needed:
- Chart paper for the blueprint
- Coloured markers, pens
- Craft materials for a prototype (optional)

Research Pointers:
- Research real-world problems
- Research sustainable materials to make your invention

Creative Guidelines:
- Your invention can be colourful and creative

Expected Outcome
A detailed invention blueprint and (if possible) a mini prototype.

Evaluation Criteria
- ✔ Originality and usefulness of invention
- ✔ Clarity and detail in the blueprint
- ✔ Creativity in presentation

Submission Format
- ✔ Blueprint + optional prototype

Project Title #4: The Secret Behind Famous Paintings!

Chapter: Celebrating great artists

Project Type

☑ Hands-on Activity ☑ Research-Based ☑ Creative

Objective

Students will investigate hidden details in famous paintings and recreate a masterpiece in their own style.

Instructions

Introduction:

- Did you know that Mona Lisa's smile changes depending on where you look?
- Van Gogh's Starry Night was inspired by his view from a hospital window!
- Just like these, let's uncover the secrets of famous paintings!

Task:

- Choose a famous painting (eg, The Starry Night, The Scream, The Girl with a Pearl Earring).

- Research and write about:
  - ✔ Who painted it and when
  - ✔ What's special or mysterious about it
  - ✔ How it influenced other artists

- Recreate the painting with a twist!
  - ✔ Use a different colour scheme or add modern elements (eg, What if Mona Lisa had sunglasses?)
  - ✔ Paint or draw a creative version of the masterpiece

- Bonus activity: Write a short fictional story about what's happening inside the famous painting!

Materials Needed:

- Chart paper or canvas
- Paints, crayons, or coloured pencils

Research Pointers:

- Famous paintings

Creative Guidelines:

- You can recreate the painting to make it more interesting or fun.

Expected Outcome

A research report on a famous painting + a creative reimagination of it.

Evaluation Criteria

✔ Depth of research and accuracy
✔ Creativity in painting interpretation
✔ Clarity in explanation

Submission Format

✔ Research report + recreated artwork

Project Title #5: The Rise of Indian Startups

Chapter: India's digitisation story

Project Type

☐ Hands-on Activity ☑ Research-Based ☑ Creative

Objective

Students will explore how startups like Zomato, Flipkart, and Paytm, became successful, and design their own startup idea in a fun way.

Instructions

Introduction:

- In the past, people bought things only from shops and learnt only from books.
- But today, startups like Flipkart and Swiggy have changed how we shop and eat—all because of technology!

Task:

- Choose one Indian startup.

- Write a short report on:
  - ✔ When and how it started
  - ✔ What problem it solves
  - ✔ How digitisation helped it grow
  - ✔ One fun fact

- Create a fun startup poster:
  - ✔ Choose a category (shopping, food, education, transport, payments).
  - ✔ Think of a name for YOUR OWN startup.
  - ✔ Draw a simple logo and write two to three lines about what it does.

- Bonus Activity: Imagine you are pitching your idea to an investor—how will you convince them to invest? (Students can present in class as a fun activity!)

Materials Needed:

- Notebook or chart paper for research
- Coloured markers for designing the startup poster

Research Pointers:

- Research on Indian startups and their success story

Creative Guidelines:

- Design a colourful poster and logo

Expected Outcome

A simple research report on an Indian startup + a fun startup poster with a creative business idea.

Evaluation Criteria

- ✔ Research, effort and clarity
- ✔ Creativity in startup idea and poster
- ✔ Presentation and enthusiasm

Submission Format

- ✔ Written report (short and simple)
- ✔ Startup poster with logo and idea