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UNIT 1 MODULE 2 ASSIGNMENT # 2

Name: _____ School: _____ Due date: 18th August 2025

Task 1: Design a model of a paper airplane

STEM Challenge: Design a model of a paper airplane that can fly the farthest before it touches the ground



Notes to consider:

Below is some information to consider when you are designing a model of your paper airplane

The paper airplane model is a versatile tool for STEM challenges, offering a hands-on way to explore scientific concepts like aerodynamics, velocity, thrust, and speed. Here are some ideas for incorporating paper airplane models into your STEM challenges:

- **Aerodynamics Exploration:** Use different paper airplane designs to teach students about the forces of flight and how they can design their own planes.
- **Flight Path Analysis:** Challenge students to predict and analyze the flight paths and distance their paper airplanes will go, exploring concepts of trajectory, velocity, and angle of launch.
- **Measurement and Data Analysis:** Encourage students to measure flight distances and record their data, analyzing results to identify patterns and make connections between design variations and flight performance.

- **Problem-Solving and Iteration:** Foster a growth mindset by encouraging students to view failures as opportunities for learning and improvement, making adjustments based on experimentation and observation.
- **Family and Community Engagement:** Create a paper plane flying challenge with family members or friends, decorating new planes together and seeing whose design can fly the farthest or perform a special trick. These STEM challenges not only provide a fun and engaging way to learn but also help students develop critical thinking, problem-solving, and collaboration skills.

Task 2: Paper airplane Model Presentation

Present your paper airplane model explaining the different STEM concepts applied in the design of the model meeting the given STEM challenge (Design a model of a paper airplane that can fly the farthest before it touches the ground) . Provide a description of the paper airplane , such that someone viewing your presentation would have a clear understanding of the product or resource and its importance regarding the context. You should also provide an explanation of the resources' relationships to the STEM in Education ideas explored during the unit. In particular, you should critique the educational context in regard to the idea of developing connections between the STEM disciplines. To present the model of your paper airplane and its discussion, you will create a 10 minute (± 1 minute) power point presentation.

Criteria

The following guide will be used to mark your presentation with regard to each criterion.

Your submission will be marked with reference to the following criteria (percentages indicate relative weight):

- **Knowledge (50%)** - Understanding of STEM in Education concepts related to principles and practices of contemporary teaching and learning in STEM.
- **Analysis (30%)** - Analyse practice using STEM in Education concepts related to contemporary teaching and learning in STEM.
- **Communication (20%)** – Communicate STEM in Education knowledge and practice.

_____ end _____