

Wave Master

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Abstract

Wave Master is a game-based courseware that explains wave topics. It is one of the teaching and learning initiatives and revolutions aimed at overcoming the problem of students getting bored quickly from traditional lessons in class, to attract them to love science even more. Wave Master has a different trainer for each topic to engage with the students. This courseware begins with an explanation and information related to the wave topic, followed by a quiz at the end of each subtopic. The students will earn a different power after completing a topic and answering the quiz on each topic and they will earn the title of "Master" if they collect all the powers. The quizzes will assess the students' understanding of the material and provide them with feedback. The feedback can help students identify areas where they need more help and improve their understanding of the concepts. Collectible powers at the end of each topic are a creative way to reward students for their progress. This can help to keep them motivated and engaged, and it can also make the learning experience become more fun and enjoyable. This courseware has guidelines for the function of every button to help students use the software easily. Wave Master provides interactive diagrams and audio recordings for the lessons and quizzes, as well as hands-on activities where the students must click buttons to go to the next slide and answer questions. These features demonstrate that Wave Master is learning courseware that complies with the visual, auditory, and kinesthetic (VAK) learning style. By complying with the VAK learning style, Wave Master can create a more inclusive and effective learning experience for all students.

Keywords: courseware, learning, wave, VAK learning style



WAVE MASTER

ABSTRACT

Wave Master is a game-based courseware that explains wave topics. It is one of the teaching and learning initiatives and revolutions aimed at overcoming the problem of students who get bored quickly with traditional methods in class and attracting them to love science more. It begins with a written explanation and picture related to the wave topic, followed by a quiz at the end of each subtopic. Students will earn a different power after answering each quiz, and they will earn the title of "Master" if they collect all the powers. This will allow students to learn while having fun.

OBJECTIVE

- Encourage students to learn in an enjoyable environment and boost their self-confidence and motivation to learn.
- Help students to get a better understanding of the concepts and phenomena related to waves.
- Help students identify areas where they need more help and improve their understanding of the concepts.

USEFULNESS

- Can be used as a home learning tool to improve student learning.
- Can be used to teach students about waves in class.

ADVANTAGES

- Comply with the VAK learning style
- Students can learn at their own pace and review the material as needed.
- Students can read the description and listen to the audio repeatedly to solidify their understanding.
- Contains compact and concise content.
- Clear and interesting visuals can make the learning experience more enjoyable.
- The teacher can get instant feedback on student progress based on the quiz results.

NOVELTY

- A game-based courseware with a captivating storyline.
- Has guidelines for the function of every button to help students use it easily.
- Audio explanations for each lesson and quiz to help students understand better.
- Words of encouragement if students answer a quiz incorrectly.
- Has a different trainer for each subtopic to engage with students and boost their motivation.

COMMERCIALISATION POTENTIAL

- Accessible in any devices without internet connection
- Target User: All students from Form 4
- Potential Market: Schools, Teachers and Parents

INVENTORS

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Surat kami : 700-KPK (PRP.UP.1/20/1)

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Saya yang menjalankan amanah,

Setuju.

27.1.2023

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