How many math questions do Prodigy students answer?

Students answer almost a question per minute while using Prodigy, according to data from more than five million sessions.[1]

	AVERAGE QUESTIONS	MEDIAN QUESTIONS	AVERAGE SESSION	MEDIAN SESSION
In class	11.5	8	14.5 mins	10 mins
At home	15.8	10	18.9 mins	11 mins

In class, the average student answers 11.5 questions in 14.5 minutes. The median session length is 10 minutes, and students answer a median of eight questions.

At home, either as homework or personal play, students answer an average of 15.8 questions and a median of 10 questions. The average and median sessions last 18.9 and 11 minutes, respectively.

Context

It's important to keep three factors in mind to contextualize this data.

1   Depth of Knowledge (DoK). Prodigy contains questions at the second and third DoK levels. This means students aren't only answering fact fluency questions, which can take a few seconds. Rather, problems can take upwards of a minute or more.[2]

2   Scaffolding. Prodigy gives hints and video lessons to students as they answer questions. This scaffolding is adaptive, in that — as an example — students who incorrectly respond to a multi-part question will only get feedback about the part they didn't properly answer.

3   Teacher control. Teachers can set in-game content to introduce, reinforce and assess lesson-aligned skills. If they choose not to, our algorithm will deliver curriculum content. Therefore, students should always face questions that are relevant to a certain degree.

Conclusion

In Prodigy, your students should consistently tackle relevant content that's appropriately challenging.

Furthermore, they'll likely enjoy the core benefits of game-based learning. These include engagement,[3] improved information storage and recollection[4] as well as opportunities to take and learn from risks.[5]

For answers to questions about this information, reach out to your Partnerships Manager.

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1. This data is from Oct. 3 to 9, 2018, taken from sessions in which the student answered at least one question.

2. This is an estimate from our in-house education team, which is made up of certified and experienced math teachers.

3. James Paul Gee, What Video Games Have to Teach Us about Learning and Literacy (Basingstoke: Palgrave Macmillan, 2008).

4. Paul Howard-Jones et al., "The Potential Relevance of Cognitive Neuroscience for the Development and Use of Technology-enhanced Learning," Learning, Media and Technology 40, no. 2 (2014).

5. Gee, What Video Games Have to Teach.