

Study S3a

2(intact logged streak, broken logged streak) x 2(short streak, long streak) between subjects conditions

To ensure you are a real person, please write the answer to this math question with ONE WORD:

eight minus two equals:

[Participants who were using a mobile device or who did not write 'six' were unable to complete the HIT and were not assigned to condition]

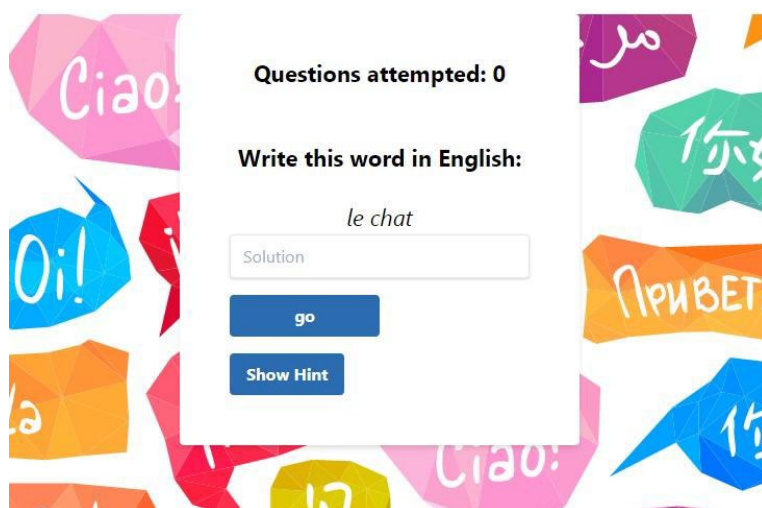
Page Break

Instructions:

In this HIT, you will be testing out a language learning app, much like the popular app Duolingo.

Page Break

Below is an example screenshot from the French language module:



To complete the question, you would put your answer (cat) into the 'solution' textbox and hit 'go.'

If you get stuck, you can click 'Show Hint' to see a helpful hint!

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Much like other apps, this app features a "**question tracker**." This tracker logs how many language learning questions you attempt while testing this app.

The purpose of this tracker is to show you your progress in completing questions. In fact, many apps use trackers like this to help motivate users.

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Language learning questions will be counted towards your question tracker as long as you have seen them; in other words, **they count even if you don't answer the question correctly**.

For example, once you attempt one language learning question, your question tracker will look like this:

Questions attempted: 1



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You have been assigned to learn Portuguese.

Press the 'Next' button to start using the language learning app.

Stimuli:

Questions attempted: 0

Write this word in English:

obrigado

Solution

go

Show Hint

Page Break

Questions attempted: 1

✓

The answer was **Thank you**.

Press the arrow to go on to the next question!

>>

Page Break

Questions attempted: 1

✓

Write this word in English:

o cachorro

Solution

go

Show Hint

The interface features a white central panel with a green checkmark and a blue 'go' button. The background is a colorful collage of geometric shapes with various words in different languages, including 'ao!', 'iHo', 'HE', '子', '好', 'Hello', and 'Hola'.

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Questions attempted: 2

✓ ✓

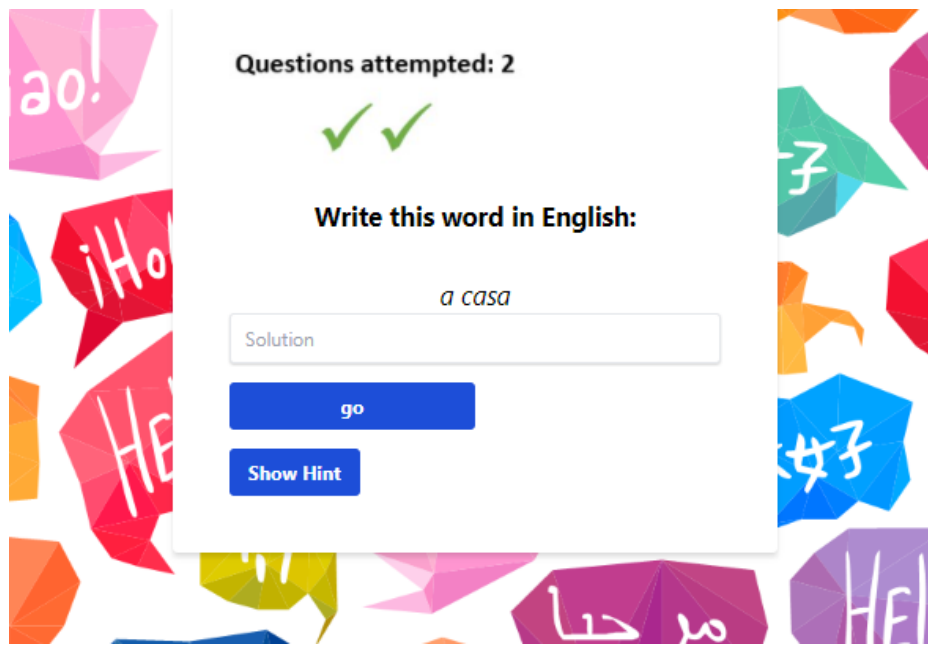
The answer was **dog**.

Press the arrow to go on to the next question!

>>

The interface shows a white central panel with two green checkmarks and a blue '>>' button. The background continues the colorful collage of geometric shapes with words like 'iao!', 'iH', 'H', 'Cib', and 'Hola'.

Page Break



Questions attempted: 2

✓✓

Write this word in English:

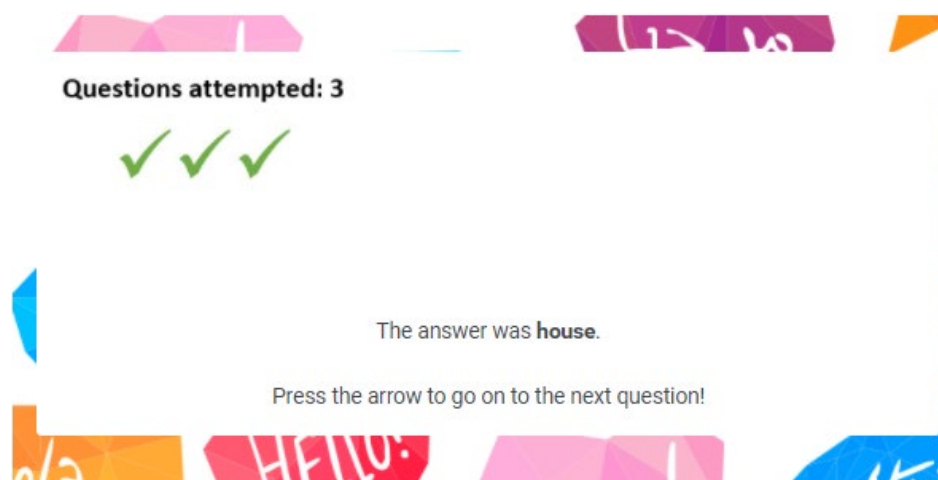
a casa

Solution

go

Show Hint

Page Break



Questions attempted: 3

✓✓✓

The answer was **house**.

Press the arrow to go on to the next question!

Page Break

Long Streak Condition saw the next 3 additional questions:

Questions attempted: 3

✓✓✓

Write this word in English:

a mesa

Solution

go

Show Hint

The interface is surrounded by a decorative border of colorful, geometric shapes and text fragments like 'o!', 'iHo', 'HE', '子', '好', and 'H'.

Page Break

Questions attempted: 4

✓✓✓✓

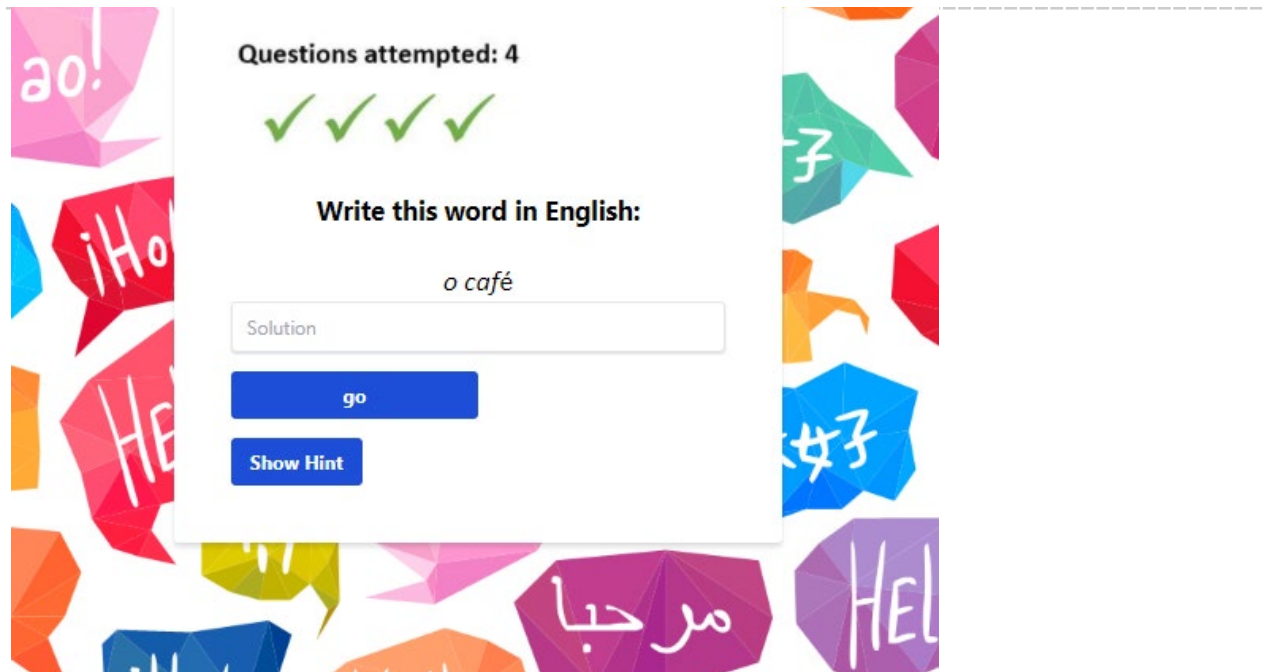
The answer was **table**.

Press the arrow to go on to the next question!

>>

The interface is surrounded by a decorative border of colorful, geometric shapes and text fragments like 'o!', 'iH', 'H', 'in', 'Hello', 'Hola', and 'O'.

Page Break



Questions attempted: 4

✓✓✓✓

Write this word in English:

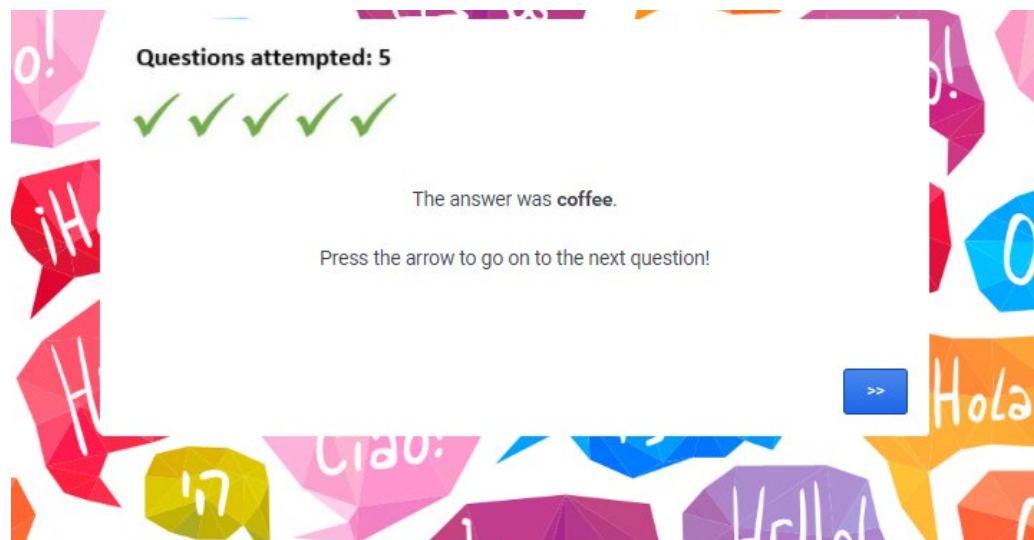
o café

Solution

go

Show Hint

Page Break



Questions attempted: 5

✓✓✓✓✓

The answer was **coffee**.

Press the arrow to go on to the next question!

>>

Page Break

Questions attempted: 5

✓✓✓✓✓

Write this word in English:

por favor

Solution

go

Show Hint

Page Break

Page Break

All conditions saw the following question, with different trackers:

Short Streak Condition:

Questions attempted: 3



Long Streak Condition:

Questions attempted: 6



Write this word in English:

o carro

Solution

go

Show Hint

Display This Question:

If condition = streak

Short Streak Condition:

Long Streak Condition:

Questions attempted: 4

Questions attempted: 7



The answer was **car**.

Press the arrow to go on to the next question!

Display This Question:

If condition = broken

Sorry, it looks like there was an error with the question tracker!

This app is still in the testing phase. We apologize for this error, but can ensure you that you will not encounter another one.

Because of this error, you now have a **broken streak**.

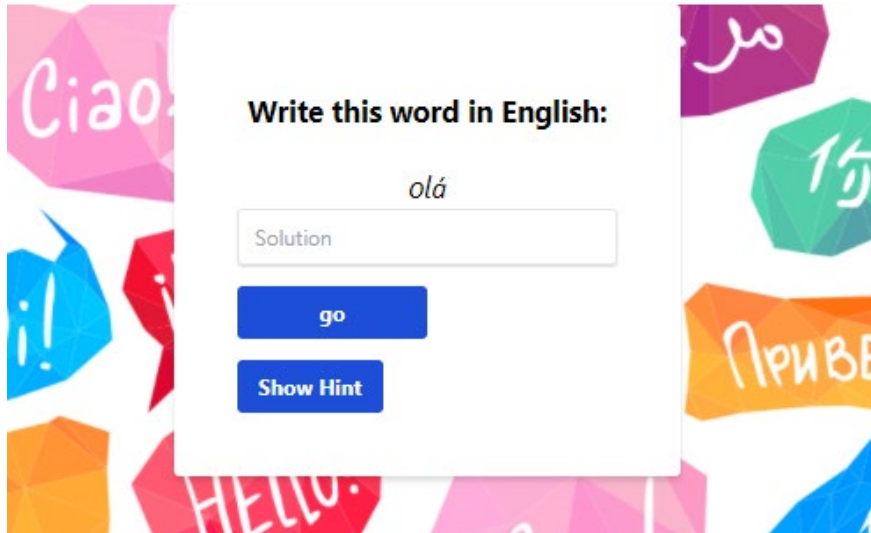
The answer was **car**.

Press the arrow to go on to the next question!

At the end of the study, based on DV choice:

Display This Question:

If DV2 = same



Display This Question:

If DV2 = different



Link: https://www.youtube.com/watch?v=a0YNpxTJzOY&ab_channel=RMVideos

Page Break

Display This Question:

If DV2 = same

The answer was **hello**.
You've finished all available language learning questions!

Questions:

Main DV:[Note that participants were NOT shown their tracker on these pages]

Display This Question:

If condition = streak

You currently have a streak on the language learning app.

You can now choose what type of activity to do next. Both activities take approximately the same amount of time.

If you choose to complete a few more language learning questions, you will **keep your streak intact**.

Alternatively, you could choose to watch a video, which would **break your streak** on the app.

Display This Question:

If condition = broken

You currently have a broken streak on your language learning app.

You can now choose what type of activity to do next. Both activities take approximately the same amount of time. You can choose between continuing to complete a few more language learning questions and watching a fun video.

Regardless of what you choose, you will still have a **broken streak** on the app.

Please make your choice:

☐ LANGUAGE LEARNING (1)

☐ FUN VIDEO (2)

Direct process measure:

Think about how you felt when you made the choice to [complete another language learning question / watch a fun video]. To what extent did you have a **goal of maintaining a streak** of completing language learning questions? [1 Not at all, 11 Very much]

Additional behavioral measures:

Display This Question:

If condition = broken

Imagine that you were to continue using this language learning app in your day-to-day life.
Would you be willing to watch a short ad to repair your broken streak in your tracker? [Yes/No]

Display This Question:

If condition = intact

Imagine that you were to continue using this language learning app in your day-to-day life.
Would you be willing to watch a short ad to maintain your streak in your tracker (i.e., prevent it from breaking if you happened to miss a question)? [Yes/No]

How likely would you be to recommend this language learning app to a friend? [1 Extremely unlikely, 11 Extremely likely]

How likely would you be to use this language learning app in the future? [1 Extremely unlikely, 11 Extremely likely]

Additional questions:

In the first study of this HIT, you could do two types of activities: watch a fun video and/or learn a language.

In general, how enjoyable do you find learning a new language? [1 Not at all, 11 Extremely]

In general, how enjoyable do you find watching videos? [1 Not at all, 11 Extremely]

Demographics:

What is your gender? [Male (1), Female (2), Other/prefer not to say (3)]

What is your age? [numeric free response]