

Trivia Wheel Instructions

4/11/16

Basic instructions

- Using dry-erase markers, write a question relating to the topic of interest on each section. (See below for suggestions and resources.)
- Invite children to play trivia by spinning the wheel. These questions are pretty effective:
 - “Would you like to learn about ____ [the brain, languages, etc.]?”
 - “Would you like to play ____ [brain, language, etc.] trivia?”
 - [for the really little kids] “Would you like to spin the wheel?”
- Once the wheel lands on a question (you may want to control this, see below), read the question out loud so that others gathered around can hear.
- Offer the child a prize after they answer (no matter whether they got it right). We usually give out brain keychains with our lab logo, pencils with brain-shaped erasers, or stickers.

Tips & tricks

- **Hold onto the base of the wheel when kids are spinning.** Some kids spin the wheel really hard and the wheel’s base is not very heavy, so it can tip over.
- **Make sure kids don’t touch the wheel while it’s spinning** (so that their fingers don’t get scratched on the rough plastic edge).
- **Considering color-coding questions by difficulty and/or topic.**
 - Write very easy questions on all of the sections of a certain color (e.g. red). When a little kid spins the wheel, it’s easy to (secretly) make sure the wheel stops on a section of that color – just use one hand to press on the back of the wheel.
 - You can also put different topics on different colored sections. That way, you make sure you don’t ask three questions in a row about the same topic, keeping things interesting for your audience.
- Multiple-choice and forced-choice questions work well. True/false questions are OK, but little kids may struggle with them so you’ll have to rephrase.
- Bring dry-erase markers & an eraser so you can change questions on the fly. If you’re part of a larger exhibit, it’s nice to create questions that spark interest in the other activities present. (For example, if somebody else is doing an activity about language diversity, you can get kids to guess how many languages are in the world.)
- While the wheel is spinning, that’s a great time to give parents your elevator pitch (if you’re trying to recruit subjects) or offer a brochure.



Lab member running Brain & Language Trivia with the “Language for Everyone” group at AAAS Family Science Day (February 2016)

Photo credit: Maryland Language Science Center
<https://www.flickr.com/photos/125604081@N06/25024111206/in/album-72157664656796516/f>

Resources for trivia questions

<http://www.linguisticsociety.org/resource/faq-how-do-we-learn-language>

<http://www.linguisticsociety.org/content/linguistics-everyday-life>

<http://www.brainfacts.org/neuromyths/>

<http://www.kids.frontiersin.org>

Questions for little kids

Think of three words that start with the sound sss.

Do these two words rhyme? MAT, BAT

Name a language that isn't English.

Language-related questions

Is there only one sign language, or are there many different ones?

There are many different sign languages, just like there are many different spoken languages. Deaf people who know American Sign Language need a sign language interpreter when communicating with deaf people who use a different language, like British Sign Language or Japanese Sign Language.

How many languages are there in the world? 7, 70, or 7000?

The exact number depends how you count them – but we think it's around 7,000.
<http://www.linguisticsociety.org/sites/default/files/how-many-languages.pdf>

Who's better at learning languages: kids or grown-ups?

Kids are better! There is a critical period for language acquisition: language learning is easiest, and most successful, when you learn during a certain period of development. Newport, E. L. (2003). Critical periods in language development. *Encyclopedia of cognitive science*.

Is it bad for kids to learn more than one language?

No! Learning additional languages will not harm a child's development. Actually, most children across the world grow up multilingual, not monolingual.

How does learning a sign language affect deaf children's ability to learn a spoken language like English? Does it help, hurt, or not make a difference?

It helps: Learning a sign language in early childhood actually makes it easier for deaf people to learn a spoken language like English. This is true whether the person is learning English at the same time as the sign language, or if they are learning English later in life, as a second language.

Mayberry, R. I., Lock, E., & Kazmi, H. (2002). Development: Linguistic ability and early language exposure. *Nature*, 417(6884), 38-38.



Brain-related questions

T/F: You only use 10% of your brain.

False! You use all of your brain. Different areas of your brain are more or less active for certain tasks, but every single part of your brain has at least one important function.

Which half of your brain controls language (in most people)? A. Right, B. Left

B. The left half of the brain processes language in 95% of right-handed people and 75% of left-handed people.

How much of your body's energy is consumed by your brain?

About 20%. Your brain needs so much energy because it is always very active - even when you are asleep.

<http://www.kids.frontiersin.org/article/10.3389/frym.2014.00006>

Once you are an adult, does your brain stop changing, or does it continue to change?

Scientists used to think adults' brains didn't change, but now we know that brain continues to change no matter how old we are. That's how we learn new things. It is true, though, that children's brains change more easily than adults' brains.