

Sign Language

Resources

- ❖ *P Is for Poppadoms! An Indian Alphabet Book* by Kabir Sehgal
- ❖ *My First Book of Sign Language* by Joan Holub
- ❖ *ABeCedarios: Mexican Folk Art ABCs in English and Spanish* (Spanish Edition) by Cynthia Weill

Extend the Moment

- ❖ Sign language is a way we communicate, what other ways do we use to communicate? (Eyes, body language, texting, writing, speech).
- ❖ Talk about other languages your family might have used or currently uses.
- ❖ Ask your child if they have ever had a hard time understanding what someone else was trying to communicate, give some suggestions for them to use if it happens again.
- ❖ Play a sign language game with your child. While one person draws the letter, the other person uses the sign for that letter. Did you get it right?



SCIGIRLS

Robot Body Language



Materials

- Paper
- Pencil
- Large paper grocery bag
- Optional: Digital camera or video recorder
- Robot Body Language PDF (PDF)
- Robot Body Language PDF (Spanish) (PDF)

Challenge your child to communicate emotions without using words or facial expressions. Can they guess what emotion you are trying to convey?

Your challenge is to communicate an emotion to your family, like a robot, without using your face or voice.

Directions

- 1** Think of ways you can tell when someone is happy (i.e., using tone of voice, facial expressions, body language). Then consider how a robot that lacks facial expressions might convey emotion. Your challenge is to find ways to express your feelings using only body movements!
- 2** Brainstorm different emotions and feelings (e.g., happiness, impatience, concern, friendliness). Then list body movements that could convey them (e.g., shoulder shrugging, head nodding, arm crossing, finger pointing, foot tapping). Remember: facial expressions and/or voice should not be included!
- 3** Have each family member take turns covering their face with a large paper bag and acting out the movements for one emotion to see if anyone can guess which emotion is being expressed. (Or, take pictures or shoot video of the actions, and then look at them together to try and guess the emotion.)
- 4** Talk about which emotions were easiest to express. Most difficult? Which might be expressed more easily with tone of voice or facial expressions? Why?



SciGirls



Discover the fun of science with your entire family!

Robot Body Language

These days social robots designed to interact with people are sold in stores as pets, housecleaners, and even healthcare assistants! To make these robots seem more humanlike, designers give them personalities using sounds, digital displays, and gestures. Can you **communicate an emotion** without using your face or voice? Find out with your family in this activity!

Here's How:

1. Think of ways you can tell when someone is happy (i.e., using tone of voice, facial expressions, body language). Then consider how a robot that lacks facial expressions might convey emotion. Your challenge is to find ways to express your feelings using only body movements!
2. Brainstorm different emotions and feelings (e.g., happiness, impatience, concern, friendliness). Then list body movements that could convey them (e.g., shoulder shrugging, head nodding, arm crossing, finger pointing, foot tapping). Remember: facial expressions and/or voice should not be included!



You'll Need:

- ◆ paper and pencil
- ◆ large paper grocery bag
- ◆ optional: digital camera or video recorder

3. Have each family member take turns covering their face with a large paper bag and acting out the movements for one emotion to see if anyone can guess which emotion is being expressed. (Or, take pictures or shoot video of the actions, and then look at them together to try and guess the emotion.)
4. Talk about which emotions were easiest to express. Most difficult? Which might be expressed more easily with tone of voice or facial expressions? Why?



Mentor Moment

As a kid, ground-breaking robot designer **Cynthia Breazeal** was inspired by the movie *Star Wars*. The first sociable robot she built at MIT, where she's now a professor, was called Kismet. Cynthia remembers that Kismet had a really expressive face. She's now working on Leonardo, who's all about character and personality. While Cynthia's work is with robots, her goals are much larger. "Technology is something you create to improve the human condition, to contribute to a better quality of life for everyone," she says.

See the Scientist Profiles at pbskids.org/dragonflytv/scientists/ to learn more.



ExxonMobil

Watch videos online at pbskidsgo.org/scigirls.

SciGirls

Actividad: Lenguaje Corporal Robótico

Los robots están por todas partes. La gente usa robots como limpiadores de casa, y también en oficinas de doctores o en hospitales. Para que los robots parezcan más humanos, los programadores les dan personalidades usando sonidos, pantallas digitales, y gestos. ¿Por qué querrían hacer esto los programadores? ¿Puedes comunicar una emoción sin usar tu cara o voz? ¡Descúbrelo con tu familia en esta actividad!

Haz lo siguiente:

1. Piensa en las diferentes maneras que hay para saber si alguien se siente feliz. ¿Cómo suenan sus voces? ¿Cuáles son sus expresiones faciales? ¿Cómo es su lenguaje corporal? Después, piensa como un robot podría transmitir emociones. Tu reto es encontrar maneras para expresar tus sentimientos ¡usando únicamente movimientos del cuerpo!
2. Genera ideas sobre diferentes emociones y sentimientos como felicidad, frustración, miedo, amabilidad. Después, haz una lista de movimientos corporales que puedan expresarlas (ej., encoger los hombros, cabecear, cruzar brazos, señalar con el dedo, zapatear). Recuerda: ¡no puedes usar tu cara ni tu voz!



Consejo de un Mentor:

Emily Manchanthasouk es una diseñadora de páginas web/gerente de proyectos quien se expresa a través de la tecnología. Empezó con la codificación de computadoras cuando se encontró diseñando cosas en Photoshop por diversión. Se dio cuenta que trabajar con computadoras le ayudó a resolver problemas y mejorar cosas para sí misma y otras personas. Después de graduarse con una licenciatura en ingeniería informática, Emmaly dice que su objetivo es “trabajar en una tecnología innovativa para mejorar la vida de la gente.”



Necesitarás:

- papel y lápiz
- una bolsa de papel grande de supermercado
- opcional: un celular o video grabadora

3. Haz que cada miembro de la familia escoja una emoción. Sin decirle a nadie que emoción escogieron, todos deben tomar turnos cubriendo sus caras con una bolsa grande de papel y actuando su emoción escogida. Todos deben adivinar cuál emoción puede ser. Un miembro de la familia también puede tomar fotos o grabar video de las acciones para después verlo todos juntos y ver si alguien puede adivinar qué emoción se está expresando.
4. Analiza cuáles fueron las emociones más fáciles de expresar. Y ¿las más difíciles? ¿Qué emoción es más fácil de expresar con expresiones faciales y tonos de voz? ¿Por qué?

Encuentra más perfiles fabulosos de STEM aquí:
tpt.org/scigirls-profiles

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