

Traits Bingo

Activity Overview

Participants cross off or color bingo squares in response to questions about their traits.

Learning Objectives

- ▶ Participants will inventory their own inherited traits.
- ▶ Participants will compare traits to determine which are most and least common in the group.

Logistics

Time Required

- ▶ **Activity Time:**
20 minutes
- ▶ **Prep Time:**
15 minutes to review activity and copy participant pages

Materials

Copies of participant pages, pen, pencil or crayon, PTC paper and hard candies if you haven't tested for this trait previously

Prior Knowledge Needed

Traits are inherited from parents; familiarity with traits listed on the bingo card is helpful

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Note: One of the traits in this activity is the ability to taste PTC. If you have not already tested for this trait in a previous activity follow these steps before beginning:

- Give each participant a piece of PTC paper and instruct them to place the paper on the tip of their tongue to see if they can taste the chemical. (PTC paper can be ordered inexpensively from: Ward's Natural Science (<http://www.wardsci.com>), Sargent Welch (www.sargentwelch.com), or Carolina Math and Science (www.carolina.com))
- Hand out a hard candy to each participant, as the taste of PTC is bitter and slightly unpleasant.

Quantities

Per Participant

- ▶ One copy of page P-1
- ▶ (Optional) One strip of PTC paper if you have not tested for this trait.
- ▶ (Optional) Hard candy if testing for the ability to taste PTC.

Activity Instructions

- Distribute a Bingo card to each participant and instruct them not to mark any squares unless told to do so.
- Read the Bingo questions (page 3) one by one (in order or randomly), instructing participants to mark the squares with an X or color them in.
- Continue to read Bingo questions (page 3) until a participant obtains a bingo.

Engaging Idea:

You may also choose to use numbered cards or slips of paper for participants to draw at random. When a particular number is drawn, read the corresponding question from the list of Bingo questions

Credits

Activity created by Molly Malone, Genetic Science Learning Center and Harmony Starr, Genetic Science Learning Center (illustrations)

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Common Misconception

Participants may think that they inherit physical traits from aunts, uncles, cousins and siblings because family members point out resemblances among relatives. In fact, physical traits are only inherited from parents, and, by extension, grandparents. Questions #5 and #6 aim to clear up this misconception should it exist.

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Bingo Questions

You may ask the questions in order, at random, or have participants draw numbers.

1. Color the square marked *I cross my right thumb over my left when I clasp my hands* if this describes you.
2. Color the square marked *Shared trait-Left* if you share a trait with the person sitting to your left.
3. Color the square marked *Least common trait* if you have a trait that not many people in the group share.
4. Color the square marked *Neighbor can not taste PTC* if you sit next to someone who cannot taste PTC.
5. Color the square or squares naming the relatives from whom you **do not** inherit traits
6. Color the square or squares naming the relatives from whom you **do** inherit traits
7. Color the square marked *I have allergies* if you have this trait.
8. Color the square marked *Trait in common - Right* if you and your neighbor to the right share a common trait.
9. Find the two squares for tasting, or not tasting, PTC and color the one that applies to you.
10. Find the two squares describing earlobes and color the one that applies to you.
11. Color the square marked *Straight hairline* if you have this trait.
12. Color the square marked *Can not roll tongue* if you have this trait.
13. Color the square marked *I have a different trait than the person sitting next to me* if this describes you.
14. Find the two squares describing hair texture and color the one that applies to you.
15. Color the square marked *Freckles* if you have this trait.
16. Color the square marked *Dimples* if you have this trait.
17. Color the square marked *Cleft chin* if you have this trait.
18. Color the square marked *I cross my left thumb over my right when I clasp my hands* if this describes you.

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Preguntas del Bingo Bingo Questions

*Puede hacer las preguntas en orden, al azar o hacer que los participantes escojan un número.
You may ask the questions in order, at random, or have participants draw numbers.*

1. Colorea el cuadro marcado “Cruzo mi pulgar derecho sobre el izquierdo cuando entrelazo mis manos” si tu haces esto.
1. Color the square marked “I cross my right thumb over my left when I clasp my hands” if this describes you.
2. Colorea el cuadro marcado “Rasgo compartido – izquierda” si compartes un rasgo con la persona sentada a tu izquierda.
2. Color the square marked “Shared trait-Left” if you share a trait with the person sitting to your left.
3. Colorea el cuadro marcado “Rasgo menos compartido” si tienes un rasgo que no mucha gente tiene en el grupo.
3. Color the square marked “Least common trait” if you have a trait that not many people in the group share.
4. Colorea el cuadro marcado “Mi vecino no siente el sabor de la FTC” si estas sentado junto a alguien que no siente el sabor de la FTC.
4. Color the square marked “Neighbor can not taste PTC” if you are sitting next to someone who can not taste PTC.
5. Colorea el cuadro o los cuadros que nombran a parientes de los cuales tu NO heredaste rasgos.
5. Color the square or squares naming the relatives from whom you do not inherit traits.
6. Colorea el cuadro o los cuadros que nombran a parientes de los cuales tu SI heredaste rasgos.
6. Color the square or squares naming the relatives from whom you do inherit traits.
7. Colorea el cuadro marcado “Tengo alergias” si tu tienes este rasgo.
7. Color the square marked “I have allergies” if you have this trait.
8. Colorea el cuadro marcado “Rasgo común – derecha” si tú y tu vecino de la derecha comparten un rasgo en común.
8. Color the square marked “Trait in common - Right” if you and your neighbor to the right share a common trait.

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Preguntas del Bingo Bingo Questions

9. Encuentra los dos cuadros marcados “Siente el sabor del a FTC” o “No siente el sabor del a FTC” y colorea el que aplique a tu persona.

9. *Find the two squares for tasting, or not tasting, PTC and color the one that applies to you.*

10. Encuentra los dos cuadros describiendo los lóbulos de las orejas y colorea el que aplique a tu persona.

10. *Find the two squares describing earlobes and color the one that applies to you.*

11. Colorea el cuadro marcado “Rayita recta” si tú tienes este rasgo.

11. *Color the square marked “Straight hairline” if you have this trait.*

12. Colorea el cuadrado marcado “No puede enrollar la lengua” si tú tienes este rasgo.

12. *Color the square marked “Can not roll tongue” if you have this trait.*

13. Colorea el cuadrado marcado “Tengo un rasgo diferente al de la persona sentada junto a mi” si esto te describe.

13. *Color the square marked “I have a different trait than the person sitting next to me” if this describes you.*

14. Encuentra los dos cuadros describiendo textura de cabello y colorea el que aplique a tu persona.

14. *Find the two squares describing hair texture and color the one that applies to you.*

15. Colorea el cuadro marcado “Pecas” si tú tienes este rasgo.

15. *Color the square marked “Freckles” if you have this trait.*

16. Colorea el cuadro marcado “Hoyuelos” si tú tienes este rasgo.

16. *Color the square marked “Dimples” if you have this trait.*

17. Colorea el cuadro marcado “Barba partida” si tú tienes este rasgo.

17. *Color the square marked “Cleft chin” if you have this trait.*

18. Colorea el cuadrado marcado “Cruzo mi pulgar izquierdo sobre el derecho cuando entrelazo mis manos” si tú tienes este rasgo.

18. *Color the square marked “I cross my left thumb over my right when I clasp my hands” if this describes you.*

TRAITSBINGO

Color or mark with an "x" the squares below when instructed to do so
 The square marked "free" is a free space

B	I	N	G	O
Aunt	I have allergies	Straight hairline	Freckles	Mother
I cross my right thumb over my left when I clasp my hands	Can not taste PTC	Curly hair	Neighbor can not taste PTC	Straight hair
Father	Grandmother	Free	Attached earlobes	Dimples
I have a different trait than the person sitting next to me	Cleft chin	Can taste PTC	Uncle	Can not roll tongue
Detached earlobes	Shared trait - Left	Trait in common - Right	I cross my left thumb over my right when I clasp my hands	Least common trait

BINGO DE RASGOS

Colorea o marca con una "X" los cuadrados que están debajo **cuando se te indique**.
 El cuadro marcado "Libre" es un espacio Libre

B	I	N	G	O
Tia	Tengo alergias	Rayita recta	Pecas	Madre
Cruzo mi pulgar derecho sobre el izquierdo cuando entrelazo mis dedos	No siento el sabor de la FTC	Cabello rizado	Mi vecino no siente el sabor de la FTC	Cabello lacio
Padre	Abuela	Libre	Lóbulos pegados	Hoyuelos
Tengo un rasgo diferente al de la persona sentada junto a mi	Barba partida	Siento el sabor de la FTC	Tío	No puedo enrollar la lengua
Lóbulos separados	Rasgo compartido – izquierda	Rasgo común – derecha	Cruzo mi pulgar izquierdo sobre el derecho cuando entrelazo mis dedos	Rasgo menos compartido