

FUTURE FACES OF PHYSICS

Physparady



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www.spsnational.org

Host Manual

Game 3

The Host is responsible for introducing the game, reading the categories at the start of each round, reading the clues, and judging the responses. The responses do not appear on the Physparady board, they are given only in this manual. If no correct response is given to a clue, the Host is responsible for reading the correct response.

Introducing the Game

Start the game by welcoming the players and audience and letting them know that this is *Future Faces of Physics Physparady*. Briefly explain how the game works, and be sure to highlight these rules:

1. Teams may not buzz in until the question has been read.
2. Teams can discuss responses prior to buzzing in, but all conversation must stop when someone buzzes in. The person that hits the buzzer must be the same person that gives the response.
3. Responses must be given in the form of a question.
4. The Host (or another person determined by the Host) is the final judge on whether an answer will be accepted.

Introducing the Categories

At the start of each new round, read the categories aloud and let the players know that first names are not required when the correct response to a clue is a person. **This game includes a category labeled 'Phy'sics. This means every response in this category includes a word with 'phy' in it.**

Reading the Clues

After a team selects a clue and the Game Operator opens the corresponding slide, you should read the clue. Take your time reading- teams will not be able to buzz in until you have finished reading the clue and the Game Operator clears the buzzer system.

Judging the Responses

Correct responses to the clues are given in this manual. Occasionally teams may give responses that are similar but not identical to the responses given in the manual, or they may interpret a clue differently from what was intended. The Host has the final say on whether a response is acceptable. If you feel more comfortable, you can delegate this role to another person not participating in the game.

Warning: do not turn the page if you plan to play the game!

Date a Scientist

100. Einstein's birthday, some celebrate it as pi day. *What is March 14?*
200. In 1903, this scientist received a Nobel Prize for her work on radiation with her husband. *Who is Marie Curie?*
300. Born on 22 Sept. 1791, the ideas of this electric scientist certainly weren't confined to a cage. *Who is Michael Faraday?*
400. Helen Quinn, well-known SLAC physicist, released the *Framework for K-12 Science Education*, outlining concepts all students should learn before graduation in this year. *What is 2011?*
500. This popular theoretical physicist was born on 8 Jan. 1942. *Who is Stephen Hawking?*

The Alphabet

100. Planck's constant. *What is h ?*
200. Newtonian constant of gravitation. *What is G ?*
300. Speed of light in a vacuum. *What is c ?*
400. The gas constant. *What is R ?*
500. Wien displacement law constant. *What is b ?*

SI Units

100. Frequency. *What is a Hertz?*
200. Power. *What is a Watt?*
300. Electric charge. *What is a Coulomb?*
400. Electric Current. *What is an Ampere?*
500. Luminous Intensity. *What is a candela?*

SPS by the Numbers

100. The number of Zones in SPS. *What is 18?*
200. Given 'to support projects designed to promote physics across cultures,' this SPS award is worth up to \$300. *What is the Marsh White Award?*
300. The amount a chapter receives after being awarded the $\Sigma\Pi\Sigma$ Undergrad Research Award. *What is \$2000.*
400. Approximate number of undergraduate students that attended the 2008 Sigma Pi Sigma Congress at Fermilab. *What is 400?*
500. The year SPS was established, you could also buy the new *White Album*, too. *What is 1968?*

Spelling

100. Speed and the direction of motion. *What is v-e-l-o-c-i-t-y?*
200. A state in which opposing forces are balanced. *What is e-q-u-i-l-i-b-r-i-u-m?*
300. Used in electric circuits to store charge. *What is a c-a-p-a-c-i-t-o-r?*
400. Having exactly similar parts facing each other around an axis. In Physics, it's often super! *What is s-y-m-m-e-t-r-y?*
500. A unit of quantum computing, similar to a bit as a basic unit of computer information. *What is q-u-b-i-t?*

Double Physpardy

Hidden 'Phy'sics NOTE: Every response in this category has a 'phy' in the word.

200. Commonly abbreviated as P.E. *What is Physical Education?*

400. A person who practices medicine. *What is a physician?*

600. A pigment in all green plants, responsible for the absorption of light. *What is chlorophyll?*

800. The branch of biology dealing with the functions of living organisms and their parts. (Some of your mail addressed to PHYS might go to this department) *What is physiology?*

1000. The missing taxonomic group: Kingdom, __, Class, Order, Family, Genus, Species. *What is phylum?*

NASA firsts

200. The first American to circle the Earth. *Who is John Glenn?*

400. Named after the *Star Trek* ship, this was the name of the first Space Shuttle. *What is the Enterprise?*

600. The first woman American astronaut. *Who is Sally Ride?*

800. In December 1962 the first successful planetary flyby was of this planet. *What is Venus?*

1000. This 'old west' word was also the name of the first NASA launch. *What is Pioneer (or Pioneer I)?*

Physics Jokes

200. A neutron walked into a bar and asked, "How much for a drink?" The bartender replied, "For you, no" ... *What is charge?*

400. Where does bad light end up? In a... *What is prism?*

600. Heisenberg went for a drive and got stopped by a cop, who asked, "Do you know how fast you were going?" Heisenberg replied, "No, but I know my..." *What is position?*

800. Why did the chicken cross the Mobius strip? To get to the... *What is 'same side'?*

1000. Have you heard about the new restaurant NASA's building on the moon? It has great food but no... *What is atmosphere?*

2012 Sigma Pi Sigma Congress

200. The theme of the 2012 Congress (two words). *What is Connecting Worlds?*

400. Congress will feature tours of this facility. *What is NASA Kennedy Space Center?*

600. Dr. Mercedes Richards will be speaking at Congress about the interdisciplinary applications of this – a technique for displaying cross sections through X-rays or Ultrasound? *What is tomography?*

800. Dr. Jocelyn Bell Burnell helped discover the first of these – highly magnetized neutron stars that emit EM radiation between 10⁴ and 10¹¹ Hz. *What are pulsars?*

1000. The 2006 Nobel Prize winning physicist speaking at Congress. *Who is John Mather?*

Name That Physicist

200. Popular US astronomer who became world famous for his popular science books and the award-winning TV series, *Cosmos: A Personal Voyage*. *Who is Carl Sagan?*

400. This American astrophysicist is the host of NovaScienceNow on PBS, and director of the Hayden Planetarium in New York. He is also scheduled to host the new version of *Cosmos* in 2013. *Who is Neil deGrasse Tyson?*

600. This scientist is the current director of the Center for SETI, the Search for Extraterrestrial Intelligence. She also spoke at the 2008 Sigma Pi Sigma Congress. *Who is Jill Tarter?*

800. This American physicist is the 12th US Secretary of Energy. *Who is Steven Chu?*

1000. This theoretical physicist is a leading expert on particle physics and cosmology. She was the first tenured woman in the Princeton University physics department and the first tenured female theoretical physicist at MIT and Harvard University. *Who is Lisa Randall?*

Final Physpardy:

Particle Accelerators

Originally built to be the world's largest and most energetic particle accelerator, this was cancelled by Congress in 1993.

What is the Superconducting Super Collider?