

## 2015 SCOP Novice 6

# Replacements

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### Tossups

1. **In this novel, Madame de Thoux [duh THOH] and Cassy reunite with their lost relatives and Ophelia is charged with educating Topsy. Eliza escapes with her son over the frozen Ohio River in this novel, and reunites with her husband, George, who had been (\*) owned by Mr Harris. This novel's protagonist rescues Eva St Clare and dies after being sold to Simon Legree. For 10 points, name this novel about a title slave, written by Harriet Beecher Stowe.**

Answer: Uncle Tom's Cabin; or, Life Among the Lowly

2. **This character helps his brother-in-law, Benjamin, save seven children from Tommy Brock, and his blue jacket is laundered by Mrs Tiggy-winkle. In a story named for his cousin, this character retrieves his jacket and shoes from Mr (\*) McGregor's garden, where he had gone instead of picking blackberries with his sisters, Flopsy, Mopsy, and Cottontail. For 10 points, name this mischievous bunny created by Beatrix Potter.**

Answer: Peter Rabbit

3. **An entry in this book describes one location as "harmless," though that entry is later edited to call it "mostly harmless." This novel ends with the *Heart of Gold* going to the Restaurant at the End of the Universe after two hyper-intelligent mice decide to make up a (\*) Question to explain why the Answer to "Life, the Universe, and Everything" is forty-two. For 10 points, name this Douglas Adams novel, in which Ford Prefect bums rides through the universe researching for the title guidebook.**

Answer: The Hitchhiker's Guide to the Galaxy (prompt on "H2G2")

4. **These organisms are always the second to experience population growth in the Lotka-Volterra equations. Aposematism and mobbing are strategies for opposing these organisms, and keystone examples of them include the (\*) sea otter in kelp forests. Herbivores like deer can be considered this type of organism in relation to plants, while typical "apex" ones include the polar bear, lion, and great white shark. For 10 points, name these organisms that hunt for prey.**

Answer: predators (accept parasites until "aposematism"; prompt consumers)

5. The bond order between two atoms of this element differentiates alkynes from alkanes. The 2010 Nobel Prize in Physics was awarded for the formation of a two-dimensional, hexagonal allotrope of this element that forms (\*) fullerenes like the bucky-ball. Another allotrope of this element has a Mohs hardness of 10. For 10 points, name this element found in graphite and diamond that has atomic number 6 and symbol C.

Answer: carbon (prompt on “C” before it is read)

6. Kerry Emanuel has tracked a 25-year increase in the force of these events by measuring their “power dissipation”, and the Mariners’ 1-2-3 rule estimates the error in predicting their paths. The (\*) Saffir-Simpson scale rates the intensity of these events which inflict the most damage by generating storm surges. Mostly calm within the eye, for 10 points, name these tropical cyclones with wind speeds above 75 miles per hour and names like Joaquin, Sandy, and Katrina.

Answer: hurricanes (accept tropical cyclone before mentioned; prompt tropical storm)

7. Many members of this group left the Church of England during the “Great Ejection”, and one member of this group coined the term “City upon a Hill” in his sermon *A Model of Christian Charity*. During the Free Grace controversy, (\*) Anne Hutchinson’s opposition of John Winthrop led to her expulsion from this group. The Massachusetts Bay Colony was founded by, for 10 points, what group of Protestants named for their desire to cleanse the church.

Answer: Puritans (prompt on Protestants)

8. Octave Chanute organized a precursor for this action along the shores of Lake Michigan, and the site for this action was selected due to its proximity to a meteorologist station and its consistent (\*) winds. The first participant of this action was selected using a coin toss, however he crashed after 3 seconds. Kitty Hawk was the site of, for 10 points, what action which led to two brothers to take to the sky?

Answer: Wright Brothers’ flight (accept descriptions that include Wright and the suggestion of flight; prompt on “flight” alone)

9. One theatre of this war is named for the severed ear of Robert Jenkins, while another is named for George II. During this war, Prussia won the Battle of Mollwitz and seized Silesia, while led by Frederick the Great, whose invasion of a neighboring country violated the (\*) Pragmatic Sanction. For 10 points, name this war fought over Maria Theresa’s ascension to the throne of a country led from Vienna.

Answer: War of Austrian Succession

10. The first use of the *corvus* devastated this city’s navy at the Battle of Mylae. One general from this empire double-enveloped Varro’s men after earning important victories at Trebia and Lake Trasimene. This city, which won the Battle of (\*) Cannae, was defeated at Zama when Scipio Africanus blew horns to scare its war elephants, led by Hannibal. For 10 points, name this North African city that fought the Punic Wars with Rome.

Answer: Carthage (accept Carthaginian Empire or Republic, Qart-Hadast, or New City)

## Bonuses

1. One animal in this poem “leaps on the back of the wind / and floats downstream to the current’s end” while the other “can seldom see through / his bars of rage”. For 10 points each

[10] Identify this creature who titles a poem that claims “I Know Why” this animal “Sings.”

Answer: I Know Why the **Caged Bird** Sings

[10] In the poem, “the caged bird sings of” this subject, indicating the bird’s desire to escape from its cage.

Answer: **freedom**

[10] “I Know Why the Caged Bird Sings” was written by this African-American author and poet, who read her “On the Pulse of the Morning” at Clinton’s inauguration.

Answer: Maya **Angelou** (accept Marguerite Annie **Johnson**)

2. Some books use animal societies to model human ones. Answer some questions about surprisingly political animals, for 10 points each.

[10] In this Richard Adams novel, a group of rabbits leave their warren and search for a new one. On the way, they encounter socialist and totalitarian rabbit communities before creating a democracy.

Answer: **Watership Down**

[10] In this George Orwell novel that parodies the Russian Revolution, a group of pigs lead a barnyard revolt.

Answer: **Animal Farm**

[10] In *Animal Farm*, this bird represents the church. The pigs initially distrust this character’s tales of Sugarcandy Mountain, but as conditions on the farm worsen, they welcome him back.

Answer: **Moses** (prompt on “raven”)

3. After the *Antelope* is shipwrecked, some pretty weird things start to happen to Lemuel Gulliver. Answer some questions about his travels, for 10 points each.

[10] Gulliver’s first stop is this island, where the inhabitants are unusually small. Residents of this island war with their neighbors on Blefuscu over the proper way to crack an egg.

Answer: **Lilliput**

[10] Gulliver later finds himself on the island of Glubbddubdrib. Here, necromancers allow him to converse with this philosopher, the teacher of Plato.

Answer: **Socrates**

[10] Gulliver’s final adventures are with these filthy and brutish humanoids who perform manual labor for an intelligent, horse-like race of Houyhnhnms [h-WIN-hims].

Answer: **Yahoos**

4. By definition, eukaryotic cells must have at least one of these organelles. For 10 points each,

[10] Name this organelle surrounded by a double envelope that contains the bulk of a cell’s genetic material.

Answer: **nucleus**

[10] During cell division the genetic material in a nucleus condenses into these paired structures that are made of DNA wrapped around proteins.

Answer: **chromosomes**

[10] A normal, diploid human cell has this many *pairs* of chromosomes, including the sex chromosomes.

Answer: **23**

5. Methionine is always the first one of these molecules added at the ribosome. For 10 points each,

[10] Name these organic molecules that have a side chain bonded to the central carbon. They are the building blocks of proteins.

Answer: **amino acids**

[10] The amino group of an amino acid bonds to a carboxyl group to make one of these covalent bonds that form the primary structure of a protein.

Answer: **peptide** bond

[10] This process can cleave a peptide bond into its amino acid components by adding a molecule of water.

Answer: **hydrolysis** (prompt on degradation)

6. There are sliding and rolling types of this force. For 10 points each,

[10] Name this force that exists whenever two surfaces are in contact with each other. It always opposes the motion of objects such as when brakes slow down a car.

Answer: **friction** (accept **static friction** or **kinetic friction**)

[10] The kinetic friction experienced by an object can be found by multiplying a coefficient of friction times this force. It is the perpendicular component of the contact force between the surface and the object.

Answer: **normal** force

[10] Friction can occur within a fluid because of this quantity, the internal resistance to flow. Molasses has a value for this quantity about 5,000 times greater than water.

[10] **viscosity**

7. White dwarfs are located at the bottom of this graph. For 10 points each,

[10] Identify this graph, named for two astronomers, that plots stars based on their luminosity, absolute magnitude, and color.

Answer: **Hertzsprung-Russell** diagram (accept **H-R** diagram or **HRD**)

[10] This type of star, located near the top of the H-R diagram, is the most luminous. These stars are named for their extremely large radius and include Rigel [RYE-jul], Antares [an-TAIR-eez], and Betelgeuse [BEET-il-jooz].

Answer: **supergiants** (do not prompt giant stars)

[10] The majority of stars on the H-R diagram fall within this region of the graph. This band includes the Sun and forms a visible downward slant in the middle of the diagram.

Answer: **main sequence** stars

8. An annulus is formed by the area "between" two of these shapes. For 10 points each,

[10] Name this round, two-dimensional shape, defined by its radius and center.

Answer: **circle**

[10] The ring-shaped annulus is only formed between two circles if they have this property; otherwise, the ring is lopsided. Circles with this relationship share a center and usually are of different sizes.

Answer: **concentric** circles (accept word forms)

[10] The area of an annulus is interestingly equal to pi times the square of the length of the longest chord through the outer circle that does not cut through the inner circle. That chord can therefore be described by this term, which describes lines that "glance off" of an object by only intersecting it at a single point.

Answer: **tangent** line (of the inner circle)

9. The target of this event was already suffering from a concussion, a broken arm, and a broken jaw protected by a splint. For 10 points each,

[10] Name this April 14, 1865 event, in which Lewis Powell stabbed, but did not kill, a Cabinet member while a separate attack at Ford's Theater developed.

Answer: the **assassination attempt** on William **Seward** (accept any description of an **attack** on **Seward**, regardless of whether they describe it as successful or failed)

[10] While Seward was being stabbed, Abraham Lincoln was being shot by this actor and Confederate sympathizer.

Answer: John Wilkes **Booth**

[10] Booth's conspiracy also planned for George Atzerodt to attack this Vice President.

Answer: **Andrew Johnson**

10. This leader's party consolidated gains in the Acerbo Law, which disinclined Victor Emmanuel II from dismissing him. For 10 points each:

[10] Name this leader of Fascist Italy who gained power during the 1922 March on Rome. Despite being his inspiration, this leader spent World War II playing second fiddle to Adolf Hitler.

Answer: Benito **Mussolini**

[10] Mussolini strengthened his ties with Nazi Germany by signing this 1939 agreement. This agreement, which excluded Japan, was originally named the Pact of Blood.

Answer: **Pact of Steel** (accept **Stahlpakt**, **Patto d'Acciaio**, or the **Pact of Friendship and Alliance between Germany and Italy**)

[10] Although Japan withdrew from the Pact of Steel, it did sign this pact which created a formal military alliance. This deal, also known as the Tripartite Pact, was named for the German capital.

Answer: **Berlin** Pact