

Directions: In this section, you are going to read a passage with ten statements attached to it. Each statement contains information given in one of the paragraphs. Identify the paragraph from which the information is derived. You may choose a paragraph more than once. Each paragraph is marked with a letter. Answer the questions by marking the corresponding letter on **Answer Sheet 2**.

What Is a Super Blood Wolf Moon?

- A) Blue moons, rose moons, supermoons. For some reason all the websites seem to think you really want to know all about these moons. "Catch This Weekend's AMAZING SUPERMOON," one headline will announce. "The Supermoon Isn't Actually A Big Deal And You're All Ruining Astronomy," another will complain.
- B) The latest example is the super blood wolf moon eclipse which sounds like the name of an emotional song I would have performed a modern dance routine to in 9th grade, but is, in fact, an astronomical event set to occur on January 20. As we'll explain below, there is nothing truly mysterious or otherwise special about this moon, and it will not look like a bloody wolf head in the sky or anything wild like that. We get these super lunar events by smashing together all the qualifiers we've historically used to keep track of full moons throughout the year, and in the age of the internet we can get a little too enthusiastic.
- C) Consider this your go-to resource for all moon-gazing news. Here's what you need to know about the latest lunar event.
- D) Look, it's okay if you don't know. There are probably loads of folks who walk around pretending they totally know why that thing in the sky seems to get bigger and smaller at regular intervals but who totally do not.
- E) The moon orbits Earth, and it's tidally locked—that means it always shows us the same face, instead of spinning around like our planet does. That's why you can always see the man on the moon (or the moon rabbit, depending on your cultural preferences) even as it spins around us. But while the moon is big and bright in the sky when it's full, that's only because it's reflecting light from the sun. But the moon is always moving, so it's getting hit with sunlight at different angles. It's invisible to us during the new moon, because our satellite is parked right between us and the sun; the so-called dark side of the moon is lit up like Las Vegas, but the side we can see is in shadow. A full moon happens when the earth is right between the sun and the moon, so sunlight hits the part we can see. And all the other phases are just the transition from one of those extremes to the other.
- F) The moon isn't always exactly the same distance from Earth, because its orbit isn't perfectly circular. We call the closest point perigee(近地点), and the most distant point is apogee(远地点). 2018's closest perigee and most distant apogee both happened in January, and the difference was about 30,000 miles.
- G) The reason you care about this ordinary change in distance is that it turns a moon super. When a full moon happens close to perigee, it's going to look a bit bigger. Honestly, the difference is not that profound, but if you're in a position to photograph the supermoon next to something that shows the slight increase in scale, it can look pretty cool. January's super blood wolf moon eclipse is super because the date lines up with the closest the moon will get to us during January, but the moon won't actually be at its closest for the year until February's supermoon, which you can expect plenty of undue excitement over.

- H) Blood moons only occur during total lunar eclipses (which can happen a few times a year in any given location). When the moon slips through our shadow, we give it a reddish coloring. The moon can also look orange whenever it's rising or setting, or if it hangs low in the horizon all night—the light bouncing off of it has to travel through a thicker atmosphere there, which scatters more blue light away. But you'll probably only see that deep, sinister red during an eclipse.
- I) A lot of headlines about moons are just ridiculous (you do not need to be particularly excited about a blue moon, it just looks like a regular full moon), but you should definitely roll out of bed to look at a blood moon if one is going to be visible in your region, even though they're just lunar eclipses and not evidence of bloody battles between the sky gods.
- J) In March of 2018, we had our second "blue moon" of the year, to much acclaim. And while that's not necessarily special in an oh-gosh-get-out-and-look-at-it way, it's certainly special: a blue moon is a nickname for when two full moons fall in the same calendar month, and we hadn't previously had two in one year since 1999. We won't have it happen again until 2037. Astronomer David Chapman explained that this is merely a peculiarity of our calendar; once we stopped doing things based on the moon and started trying to follow the sun and the seasons, we stopped having one reliable full moon per month. The moon cycle is 29.53 days long on average, so in most months we still end up with a single new moon and a single full one. But every once in a while, one month steals a full moon from another. In 2018 (and in 1999, and again in 2037) both January and March stacked full moons on the first and last nights of the month, leaving February in the dark.
- K) Getting two blue moons a year is rare, but we have individual blue moons every few years. Also, fun fact: not actually blue. A moon can indeed take on a moody blue color, but this only happens when particles of just the right size disperse through the sky—and it has nothing to do with the moon's status as "blue". Big clouds of ash from volcanic eruptions or fires can do the trick, but it doesn't happen often, and the stars would certainly have to align for two such rare instances to occur at once.
- L) You may have heard that the super special second blue moon of 2018 was also a Paschal moon. This is true! That just means it was the first full moon of spring, which is often used to determine the date of Easter Sunday. All of this is just calendar nonsense and we refuse to go into it further.
- M) Sometimes you'll see a headline that promises a moon with so many qualifiers it makes your head spin. A super blue blood worm moon, perhaps? Or a super blood wolf moon? Lots of websites will tell you that "wolf moon" is the traditional name of the first full moon of the year in "Native American" cultures, which is kind of a weird thing to claim given that there are 573 registered Tribal Nations in the US alone today, not to mention historically. The idea that hungry, howling wolves were such a universal constant in January that all of North America with its different cultures, geographies, and languages spontaneously came up with the same nickname is illogical.
- N) Many cultures have traditional names for the full moon in a given month or season, so there's quite a list to draw from if you're trying to really juice up a story on a slightly-bigger-than-average view of the moon. But these are all based on human calendars and activities and folklore; you will not go outside and see a pink moon in April, though I wish it were so.
36. We cannot see the moon at times when it is positioned right between the earth and the sun.
37. Volcanic eruptions may cause the moon to assume a moody blue color.
38. The moon will be closest to the earth when the supermoon occurs in February.

39. There is nothing unusual about the super blood wolf moon, which will bear no resemblance to a bloody wolf head.
40. The moon will appear orange when the light reflecting from it travels through an atmosphere thicker than usual.
41. It is contrary to logic to claim the name of wolf moon originates from the cultures of American Indians.
42. As the moon's orbit is not a hundred-percent circle, its distance from the earth changes.
43. A full moon in a given month or season gets a specific name in different cultures.
44. There are likely lots of people who know absolutely nothing about why the moon appears to change its size regularly but act like they know.
45. When a full moon appears twice in the same month, it is nicknamed a blue moon.