

Name: _____ Date: _____

MPAH! Science – Grade 5 – Self-Check - Unit 25 The Sky

1. The Moon's gravitational pull causes _____.
2. The time between tides is about _____ hours and _____ minutes.
3. The _____ are due to the tilt of the Earth's axis as the Earth orbits the Sun.
4. Stars are always in the sky, but we cannot see them during the day because the light from the _____ is so bright.
5. The groups of stars that form patterns in the sky are called _____.
6. A _____ occurs when the moon passes directly between the Earth and the Sun, and the Moon's shadow falls on the Earth's surface during that time.
7. A _____ occurs when the moon is on the opposite side of the Earth as the Sun, and the Moon passes through all or some portions of the Earth's shadow.
8. A lunar eclipse occurs when the _____ passes through the shadow of the _____. A solar eclipse occurs when the _____ casts a shadow on the surface of the _____.
9. Sam and John wanted to find out the factors that affect tides. They collected data on the tides for three days for analysis. The data they have collected is recorded in the table. Using the information from the table, answer the following questions.
 - a) After analyzing the data, Sam realized that the tides are affected by wind speed – a high tide is caused by strong winds, while a low tide is due to the lack of wind. What do you think of Sam's theory?

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b) John's theory is that the tides have a regular frequency. Do you think John is right? If so, what is the average time between two high tides?

c) John also believes that rainfall somehow affects the tides. Heavy rain is associated with high tides. Do you think John is right?

Day	Time	Type of tide	Height of tide	Wind speed	Rainfall
Monday	9.32 p.m.	High	2.58 m	Weak	Light
Tuesday	3.44 a.m.	Low	0.77 m	None to very weak	None
Tuesday	10.57 a.m.	High	2.63 m	Moderate	Light
Tuesday	5.10 p.m.	Low	1.59 m	None to very weak	None
Tuesday	11.22 p.m.	High	2.78 m	None to very weak	Moderate
Wednesday	5.35 a.m.	Low	0.66 m	None to very weak	None
Wednesday	11.48 a.m.	High	2.76 m	Strong	Moderate
Wednesday	6.00 p.m.	Low	1.39 m	Moderate	Heavy
Thursday	12.14 a.m.	High	2.96 m	Very strong	Heavy