

- P3. Jane and Mario were discussing what it might be like to live on other planets. Their science teacher gave them data about the Earth and an imaginary planet, Athena. The table shows these data.

	Earth	Athena
Atmospheric Conditions	21% oxygen	10% oxygen
	0.03% carbon dioxide	80% carbon dioxide
	78% nitrogen	5% nitrogen
	ozone layer	no ozone layer
Distance from a Star Like the Sun	148,640,000 km	103,600,000 km
Rotation on Axis	1 day	200 days
Revolution Around Sun	365 ¹ / ₄ days	200 days

Write down one important reason why it would be difficult for humans to live on Athena if it existed.

P-3 Coding Guide

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Code	Response
Correct Response	
10	States that there would be too much carbon dioxide. <i>Example: Too hot (greenhouse effect).</i>
11	States that there would be too little oxygen to breathe.
12	Refers to bound rotation, that is, the periods of revolution around the planet's own axis and rotation around its sun are the same. Hence, one side of the planet is always facing the sun and therefore is hot while the other side is always dark and cold. <i>Examples: Too hot because one side always faces the sun. Too cold on the side that is away from the sun.</i>
13	States that there is no ozone. <i>Example: UV radiation is dangerous.</i>
14	Any combination of above codes, 10-13.
19	Other correct.
Incorrect Response	
70	States that it is too close to a star, without further explanation.
79	Other incorrect or seriously incomplete.
Nonresponse	
90	Crossed out/erased, illegible, or impossible to interpret.
99	BLANK