Module 14
Exploring Creation With Physical Science, edition 1

Longitudinal wave - A wave whose propagation is parallel to its oscillation (347)
Pitch - The highness or lowness of a sound (359)
Sonic boom - The sound produced as a result of aircraft traveling at or above Mach 1 (356)
Supersonic speed - Any speed that is faster than the speed of sound in the substance of interest (356)
Traverse wave - A wave whose propagation is perpendicular to its oscillation (347)

Study all of the mathematical examples
Schedule
☐Read 345-348
☐Read 348-351, do experiment 14.1
☐Read 351-355, do experiment 14.2
☐Read 355-358
☐Read 358-360, do experiment 14.3
☐Read 361-362, do experiment 14.4
☐Read 363-366, do experiment 14.5
☐Read 366-368
☐Study
☐Test

$f=\frac{v}{\lambda}$ *f* represents frequency of wave, *v* stands for speed, λ is lambda and represents wavelength

The speed of sound in air equation:
$v = (331.5 + 0.60 \cdot T)\ \frac{m}{sec}$

distance = (speed)(time)
Notes:

Always do the On Your Own questions and check your work afterwards.

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Module 15
Exploring Creation With Physical Science, edition 1

Electromagnetic wave - A transverse wave composed of an oscillating electrical field and a magnetic field that oscillates perpendicular to the electrical field (374)
The Law of Reflection - The angle of reflection equals the angle of incidence (383)

Schedule
☐Read 372-376, Draw and label Figure 15.1.
☐Sunny day needed, Read 377-381, do experiment 15.1
☐Read 381-384, do experiment 15.2
☐Read 384-389, do experiments 15.3 and 15.4
☐Read 389-393, , stop at Human eye, but draw and label Fig 15.7.
☐Read 393-400, do experiment 15.5
☐Study, take a day or more
☐Test
Notes:

Always do the On Your Own questions and check your work afterwards.

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Module 16
Exploring Creation With Physical Science, edition 1

Critical mass - The amount of isotope necessary to cause a chain reaction (410)
Galaxy - A massive ensemble of hundreds of millions of stars, all interacting through the gravitational force, orbiting around a common center (422)
Light year - The distance light travels in a year (421)
Nuclear fission - The process by which a large nucleus is split into two smaller nuclei (409)
Nuclear fusion - The process by which two or more small nuclei fuse to make a bigger nucleus (409)
Star magnitude - The brightness of a star on a scale of -8 to +17. The smaller the number, the brighter the star. (414)

Schedule
☐Read 405-408, Draw and label Figure 16.1.
☐Read 409-412
☐Read 412-417, Draw and label Figure 16.4.
☐Read 417-419
☐Read 419-422, Draw and label Figure 16.6.
☐Read 422-427, do experiment 16.1
☐Study
☐Test

You are finished! ☺
Notes:

Always do the On Your Own questions and check your work afterwards.

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