Achievement Standard

Subject Reference  Earth and Space Science 2.6
Title  Demonstrate understanding of stars and planetary systems
Level  2  Credits  4  Assessment  External
Subfield  Science
Domain  Earth and Space Science
Status  Registered  Status date  17 November 2011
Planned review date  31 December 2020  Date version published  20 November 2014

This achievement standard involves demonstrating understanding of stars and planetary systems.

Achievement Criteria

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<th>Achievement</th>
<th>Achievement with Merit</th>
<th>Achievement with Excellence</th>
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<tr>
<td>• Demonstrate understanding of stars and planetary systems.</td>
<td>• Demonstrate in-depth understanding of stars and planetary systems.</td>
<td>• Demonstrate comprehensive understanding of stars and planetary systems.</td>
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Explanatory Notes


This standard is also derived from Te Marautanga o Aotearoa. For details of Te Marautanga o Aotearoa achievement objectives to which this standard relates, see the Papa Whakaako for the relevant learning area.

2 Demonstrate understanding involves describing:
• characteristics of stars
• the position of stars on the Hertzsprung-Russel (HR) diagram
• stages in the birth, life and death of stars
• characteristics of planetary systems
• stages in the formation of planets and moons.
Demonstrate in-depth understanding involves explaining:
- how the characteristics of stars are linked to their position on the Hertzsprung-Russel (HR) diagram
- stages of the birth, life and death of stars
- stages in the formation of planets and moons.

Demonstrate comprehensive understanding involves explaining in detail:
- how characteristics of stars are linked to their position on the Hertzsprung-Russel (HR) diagram with reference to all stages in the life cycles of stars
- stages in the birth, life and death of stars with reference to energy changes
- stages in the formation of planets and moons with reference to changes in temperature.

3 A planetary system refers to one star, its orbiting planets and associated moons.

4 Assessment Specifications for this achievement standard can be accessed through the Science Resources page found at http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/ncea-subject-resources/.

Replacement Information
This achievement standard replaced AS90764.

Quality Assurance

1 Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.

2 Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference 0233