



# SECTION FIVE: GLOSSARY AND ADDITIONAL RESOURCES

## CURRICULUM TERMS

### ARTS

#### DANCE

**Elements of Dance:** Body awareness, space, time, energy, relationship.

#### DRAMA

**Elements of Drama:** Role, relationship, time and place, tension, focus, and emphasis.

#### MUSIC

**Elements of Music:** Duration, pitch, dynamics, timbre, texture/harmony, form.

**Metre:** The grouping of beats in music using time signatures.

**Ostinato:** A continuous repeated rhythmic or melodic pattern.



## VISUAL ART

**Earthenware:** Ceramic made of clay fired to a porous state that can be made impervious to water by the use of a glaze.

**Elements of Design:** Line, shape, colour, texture, space, value (light/dark).

**Fritware:** Ceramic made of quartz, glass, and clay that is harder and more durable when fired than earthenware. Fritware was a major Muslim invention in the eleventh century in Egypt and Iran.

**Glaze:** A vitreous (glasslike) substance used to coat ceramics before re-firing them.

**Interlacement:** Two-dimensional or relief design consisting of bands that appear to pass over and under one another, creating the illusion of three-dimensionality.

**Lustre:** A technique for decorating ceramics and glass; on ceramics, metal alloys are applied to a fired ceramic object. After further firing, the ceramic surface has an iridescent sheen.

Lustre was a major Muslim invention in 9th-century Iraq.

**Mosaic:** A work of art made of small pieces of a rigid material such as glass, pottery, or coloured stones.

**Pattern:** (1) A regular arrangement of repeated elements (shapes, lines, colours);  
(2) a template, model, or guide for making something.

**Porcelain:** A hard, light, translucent type of pottery that was invented by the Chinese early in their history. Fritware was invented by Muslim artisans as an attempt to imitate porcelain.

**Principles of Design:** Contrast, repetition, variety, emphasis, proportion, pattern, balance, unity, harmony.

**Relief Design:** A feature of carving or sculpture in which the form projects somewhat from a background but is still meant to be viewed from one side.

**Slip:** A creamy mixture of clay and water used to coat ceramics or to attach handles, etc.



# MATHEMATICS

## GEOMETRY AND SPATIAL SENSE

**Congruent:** Having the same size and shape.

**Symmetry Operations:** The specific motions by which a fundamental motif is repeated as an isometry; that is, exact replicas are related to the original by the transformations of translation, reflection, rotation, or glide reflection to make a pattern. The symmetry operations are used in art, although almost never isometrically. However, they are vital tools of design, and the practice of “symmetry breaking” can contribute to the liveliness of a composition.



Translation: A motif is repeated exactly, with no reflection or rotation.



Reflection: A motif is repeated along an axis of reflection. Also called mirror symmetry.



Rotation: A motif is repeated around a central point. Also called radial symmetry.



Glide reflection: A motif is repeated by translating it horizontally, then reflecting it vertically, or by translating it vertically, then reflecting it horizontally.

**Transformation:** A change in a motif in a pattern that results in a different position, orientation, or size.



# SCIENCE AND TECHNOLOGY

## STRUCTURES AND MECHANISMS

**Hydraulic System:** A system that use the pressure of a liquid to do work.

**Pneumatic System:** A system that uses the pressure of a gas.

## MATTER AND ENERGY

**Chemical Change:** A change in matter that implies the formation of a new substance.

The changes are irreversible.

**Particle Theory:** All matter is made up of tiny particles that are always moving, that attract one another, and that have space between them.

**Physical Change:** A change in the shape, appearance, or state of material so that it can still be recovered as the original material.

# LANGUAGE

**Blog:** A short term for weblog, an online diary or journal.

**Critical Literacy:** Critical thinking that involves looking beyond literal meaning to analyze and evaluate a text's complete meanings and the author's intent.

**Digital Storytelling:** Using digital methods, including video, audio, and still photography, to tell a story.

**Media Literacy:** An informed and critical understanding of the nature of the media, their techniques, and the impact of those techniques.

# SOCIAL STUDIES

**Culture:** The way in which people live, think, and define themselves as a community.

**Diversity:** The variety of groups of people who share a range of physical, cultural, or social characteristics.

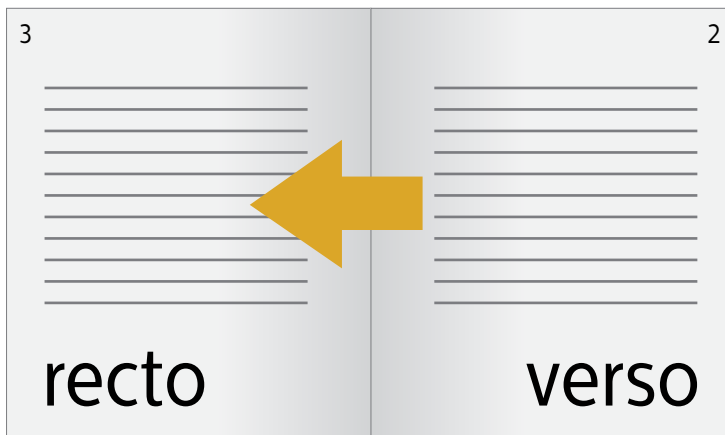
**Pluralism:** The ability of diverse groups of people to live together, with disagreement but without conflict.



## OTHER TERMS

**Deccan:** A triangular plateau in southern India bounded by the Malabar Coast in the west, the Coromandel Coast in the east, and the Vindhaya Mountains in the north.

**Folio:** A sheet or leaf in a manuscript; the pages are referred to as recto, or front, and verso, or back. In an Arabic manuscript, which is read in the opposite direction to English (from right to left), verso is the page to the right of the binding and recto is the page to the left of the binding.



**Hinduism:** A religious and social system in India that includes a belief in reincarnation, the worship of several gods, and vegetarianism for some Hindus.

**Mamluks:** A group of warriors who ruled in Egypt and Syria from the 13th to 16th centuries.

**Moghuls:** Rulers in India from the 16th to 19th centuries.

**Ottomans:** A group of Turkoman rulers of the Turkish empire in Asia Minor and much of Southern Europe from the 13th to early 20th centuries.

**Persia:** A country in Southwest Asia, now known as Iran. In historical times Persia included West Asia, Egypt, and parts of Central Asia and Eastern Europe.

**Qur'an:** The sacred book of the Islamic religion. Muslims believe that the Qur'an is the Word of God revealed to the Prophet Muhammad in the 7th century CE. The central message of the Qur'an is for humanity to believe in and worship God and live a pious and ethical life.

**Safavids:** Rulers of Persia from the 16th to 18th centuries.

**Shah:** A title of the rulers of Iran and later of India.

**Sufism:** Islamic mysticism dating back to the 8th century that seeks a spiritual path to God.

**Sultan:** An Islamic title of authority.

**Timurids:** Rulers of West and Southwest Asia in the 14th and 15th centuries.

Unless otherwise noted, term definitions are taken from the Ontario Ministry of Education Curriculum; *Islam: Art and Architecture*, edited by Markus Hattstein and Peter Delius; and the *Canadian Oxford Dictionary*.





# RESOURCES AND FURTHER READING

## ARTS

*Aga Khan Museum Guide*. Toronto: Aga Khan Museum, 2014.

Ekhtiar, Maryam D., and Claire Moore, eds. *Art of the Islamic World: A Resource for Educators*. Accessed at [www.metmuseum.org/learn/for-educators/publications-for-educators/art-of-the-islamic-world](http://www.metmuseum.org/learn/for-educators/publications-for-educators/art-of-the-islamic-world).

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## LITERATURE

Laird, Elizabeth. *Shahnameh: The Persian Book of Kings*. London: Frances Lincoln Children's Books, 2012.

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## SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS (STEM)

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al-Hassani, Salim T.S., ed. *1001 Inventions: Muslim Heritage in Our World*. Manchester: Foundation for Science, Technology, and Civilization, 2012.

Broug, Eric. *Islamic Geometric Design*. London: Thames & Hudson, 2013.

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# NOTES



