THE JOURNEY OF THE ASTRONOMICAL IDEAS ON THE MAP

The role of the Islamic culture in the development of astronomy as a science

, Haus der Astronomie

Argomento del programma di studi
Islamic heritage, maps, cultures

Le grandi idee della scienza
Earth is a very small part of the universe.

Parole chiave
Astronomy, history, geography, cultures

Fascia d'età
6 - 14

Livello scolastico
Primary School, Middle School

Tempo
30min

Dimensione del gruppo
None

Supervisionato a fini di sicurezza
Unsupervised

Costo
Low (< ~5 EUR)

Luogo
Indoors (small, e.g. classroom)

Competenze chiave
Communicating information

Tipo di attività didattica
Fun learning

BREVE DESCRIZIONE

The activities on "the map of the journey of ideas" invite pupils to identify with figures the places where the first ideas about the sky, the Sun, the Moon, the stars and movements of the planets arose, and to follow their journey from Babylon and Egypt to Greece, then to the Middle-East, and from there through North Africa to the south of Spain. By means of these activities the pupils can visualize the Islamic world as an extended corridor in which many ideas and inventions traveled, were exchanged, translated and further communicated to new generations.

FINALITÀ

- follow the journey of astronomical ideas on a map
- summarize what is learnt about the Islamic heritage in astronomy through the Journey of Ideas

OBIETTIVI DIDATTICI

Pupils summarize and link what they learn in each chapter to key historical figures and their astronomical achievements by placing them on the geographical and historical context of the map. In doing so they discover that the scientific endeavor is a transcultural activity and realize the role played during the Islamic olden Ages in building a bridge between the Greek ancient scientific tradition and the European Renaissance.

VALUTAZIONE

Through these activities teachers will be able to measure the achievement of the following main goals:

1. Children's capacity of linking together the historical figures, their achievements and places they have lived.

2. Children's capacity to place their knowledge in a historical context.
3. Children's capacity to recognise that they belong to a rich heritage of distinguished scientists who helped shape the global history of astronomy and space sciences during the Islamic Golden Ages.

MATERIALI

- Map of the Journey of Ideas (contained in the kit)
- **Set of cards 1** related to each chapter (cities, figures and instruments)
- **Set of cards 2** containing texts and questions to reproduce the whole journey

Fig. 4 Modified map by Scorza from original of Foundation for science technology and civilisation & 1001 inventions.

INFORMAZIONI DI BASE

Before going through the activity and the complete set of activities from the Journey of Ideas, read the introduction attached: The Journey of Ideas 1. Introduction, science as a transcultural entreprise.

DESCRIZIONE COMPLETA DELL'ATTIVITÀ

Activity I Recognising people, cities and instruments after each chapter

This activity can be played by children that cannot read nor write. (a) After introducing a chapter and after performing the activities therein, the children are asked to place on the map the **cards of set 1 of that chapter** containing: (a) Scholars (astronomers, scientists) (b) Cities (c) Instruments

The children can then be invited to explain to the group what they know about the cities, scholars and instruments. The solutions are given in each chapter, with images of the map containing the correct locations of the cards.

Activity II: Playing the whole Journey of astronomical Ideas

To be played with children that can read Place the large map of the journey of astronomical ideas on a table. **The cards of set 1** should be placed on the table grouped in three categories: **scholars, cities and instruments**. Mix the **cards of the Set 2** with the texts and distribute them among the children standing around the table. Each child should read its own cards silently. The child who has the card with **the Sundial** starts the game by reading aloud the text and by asking the question at the bottom of the card. The child having this answer will recognise the scholar, city or instrument on it. She/he will place the **card of Set 1** with the first answer on the map and read aloud the text and the second question. The child having the card with the second answer will answer aloud, place the corresponding card on the map and read the text and the questions, and so on. The games ends when a child reads the last card, which has a question linked to the sundials. The cycle of information and questions has been completed.

PROGRAMMA DI STUDI

Space Awareness curricula topics (EU and South Africa)

The journey of ideas, Islamic heritage, maps, cultures

CONCLUSIONE

Go on your Journey of Ideas with chapter 2:

2 - The birth of the astronomical ideas: astronomy for religious and practical use

This resource was selected and revised by Space Awareness. Space Awareness is funded by the European Commission's Horizon 2020 Programme under grant agreement nº 638653