SPACE awareness

HELP AL-SUFI MATCH THE ARABIC AND GREEK CONSTELLATIONS

Can you identify the groups of stars?

, Haus der Astronomie

Tema del plan de estudio
Constellations

La gran idea de la ciencia

Palabras clave
Islamic heritage, constellations

Edades
6 - 14

Nivel del sistema educativo
Primary School, Middle School

Tiempo
1h30

Tamaño del grupo
None

Supervisión de seguridad
None

Gasto
Low (< ~5 EUR)

Ubicación
Indoors (small, e.g. classroom)

Competencias básicas
Asking questions, Analysing and interpreting data, Communicating information

Tipo de actividad de aprendizaje
Partial enquiry

BREVE DESCRIPCIÓN

Following in the footsteps of the Persian astronomer Al-Sufi, children are invited to search for and match the corresponding pairs of Arab constellations (seen by Arab tribes) and Greek constellations describing the same group of stars. The activity comes with a set of cards that contain illustrations of the constellations from both cultures. The children use them to fulfill that task.

OBJETIVOS

The children will realise that the constellations are not the same for different cultures. They will learn that the ones we know today have roots back to the ancient Greeks, while the medieval Persian astronomer Al-Sufi merged Greek and Arab tradition when compiling a new compendium of stellar constellations. The activity strengthens pattern recognition skills.

OBJETIVOS DE APRENDIZAJE

After this activity, the children will be able to:

- recognise stellar constellations by identifying groups of stars.
- name the astronomer who combined the constellations of the Greek and the Arabic traditions as well as his home country or region.

EVALUACIÓN

- After the activity, use a few cards with Greek constellations and ask the children for the names.

- After telling the short story about Al-Sufi, ask the children for his name and home country.

MATERIALES

- Set of cards “Arabic and Greek constellations”

INFORMACIÓN DE REFERENCIA

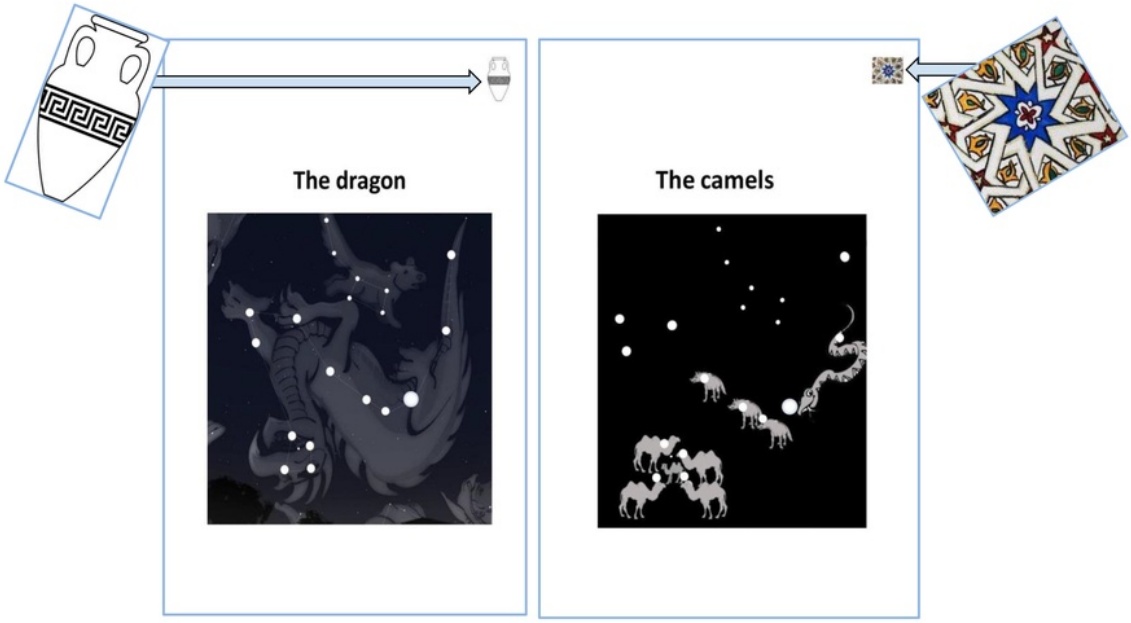


Al-Sufi (Credits: Scorza)

The astronomer Al-Sufi lived and worked in the magnificent city of Isfahan in the late 9th century. Try to find this city on the map of the “Journey of Ideas”! Al-Sufi drew maps of the night sky and improved on the charts drawn by the ancient Greeks. For several years he compared the constellations imagined by the Greeks with those of the Arabic tradition and tried to identify which stars were common to both. He ended up by choosing the Greek constellations for his “Book of Fixed Stars” but kept the Arab names of the stars from his own culture. You can best understand what a great person he was by joining him in his work!

DESCRIPCIÓN COMPLETA DE LA ACTIVIDAD

Take the cards “Arab and Greek constellations”. Note the Greek symbol of a vessel on the Greek constellation cards (right upper corner) and the piece of an Arab mosaic on the Arab ones. Shuffle all the cards thoroughly. Now search for the pairs of Greek and Arab cards containing the same group of stars. Look carefully at the patterns and distributions of stars. After you think that you have found the matching pairs, turn over the cards to check whether you are correct.



Card game Greek and Arabic constellations (Credits: Scorza)

PLAN DE ESTUDIO

Space Awareness curricula topics (EU and South Africa)

The journey of ideas, Constellations

CONCLUSIÓN

By matching groups of stars on playing cards, the pattern recognition skills of the children are strengthened. By comparing different interpretations of stellar groups from the ancient Greek and medieval Arab world, the children realise that constellations are not real but were invented by mankind, and each culture has its own set of constellations. They also realise that great astronomers like Al-Sufi tried to merge various influences to increase knowledge.

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