

Astronomía

U	Y	P	L	A	N	E	T	A	K	E	F	S	M
Z	N	F	X	R	N	D	V	U	C	S	D	N	W
S	U	R	J	O	W	J	B	L	M	T	N	G	A
W	B	T	Ú	X	D	Q	B	P	K	R	E	W	E
P	G	Z	P	Y	X	U	S	U	K	E	B	N	X
F	B	E	I	B	B	L	G	Y	L	L	U	K	T
D	L	M	T	X	K	C	X	Y	K	L	L	V	T
T	G	F	E	H	B	F	W	Y	K	A	O	W	S
X	J	P	R	O	K	S	N	J	N	A	S	W	I
E	O	G	A	L	A	X	I	A	V	E	A	R	G
S	O	L	C	G	V	K	H	O	Y	H	V	O	K
X	P	K	M	R	H	D	E	T	I	K	M	A	J
Q	X	T	E	L	E	S	C	O	P	I	O	E	C
J	F	F	U	N	I	V	E	R	S	O	Y	Z	Y

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Estrella	Galaxia
Júpiter	Nebulosa
Planeta	Sol
Telescopio	Universo

In the mid 20th century we began launching satellites into space that would help us determine the exact circumference of the earth forty thousand thirty kilometers but over two thousand years earlier in ancient _____ a man arrived at nearly that exact same figure by putting a stick in the ground that man was _____ a Greek mathematician in the head of the Library of _____ Eratosthenes had heard that in Syene a city to the south of Alexandria no vertical shadows were cast at noon on the summer solstice the Sun was directly overhead he wondered if this were also true in Alexandria so on June 21st he planted a stick vertically in the ground and waited to see if a shadow would be cast at noon it turns out there was one and it measured about seven degrees now if the sun's rays are coming in at the same angle at the same time of day and a stick in Alexandria is casting a shadow while a stick in Syene is not it must mean that the Earth's surface is curved and Eratosthenes probably already knew that the idea of a spherical earth was floated by _____ around 500 BC and validated by Aristotle a couple centuries later if the earth really was a sphere

Eratosthenes could use his observations
to estimate the circumference of the
entire planet since the difference in
_____ length is seven degrees between
Alexandria and Syene that means the two
cities are seven degrees apart on
earth's 360 degree surface
Eratosthenes hired a man to pace the
distance between the two cities and
learn there were 5000 stadia apart which
is about 800 kilometers he could then
use simple proportions to find the
Earth's circumference 7.2 degrees is one
fiftieth of 360 degrees so 800
kilometers times 50 equals _____
kilometers and just like that a man
2,200 years ago found the circumference
of the entire planet with just a stick
and his brain
you