

## PATTERNS IN THE SKY

### **ALL**

THERE'RE PATTERNS EVERYWHERE YOU LOOK  
ON CARPETS, FLAGS, IN EVERY NOOK  
MY SOCKS HAVE PATTERNS THAT REPEAT  
TO GIVE ME COOL DESIGNER FEET.

SOME ACTIONS CAN BE PATTERNS TOO  
IF THEY'RE PREDICTABLE TO YOU  
"I DON'T LIKE THIS PATTERN," MOM HAS SAID  
EACH NIGHT WHEN I WON'T GO TO BED.

BUT MY FAVORITE REGULARITIES, IT MUST BE SAID  
ARE RIGHT OVERHEAD...

PATTERNS IN THE SKY  
THE STARS AND MOON AND SUN  
PATTERNS IN THE SKY  
THEIR RACE IS NEVER DONE.

REGULAR AS CLOCKWORK  
CAN'T HELP BUT WONDER WHY  
PATTERNS IN THE SKY.

TODAY THE SUN WILL RISE AND SET  
THE SAME TOMORROW, I WILL BET  
THE MOON LOOKS AWFULLY FULL THESE DAYS  
BUT WE ALL KNOW THAT'S JUST A PHASE.

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PATTERNS IN THE SKY.

**STUDENT #1**

Hey, what's wrong?

**STUDENT #2**

We don't understand the assignment.

**STUDENT #3**

Yeah, we're supposed to find patterns in the sky but every time we look, the sun and moon are in different places.

**STUDENT #1**

Where's your notebook?

**STUDENT #2**

Uh, notebook?

**STUDENT #1**

Yeah! You have to write down what you see and when. Then you can find the pattern.

**STUDENT #3**

OHHHHHH.

**STUDENT #1**

Taking careful notes is an important part of scientific observation.

**STUDENT #2**

I've got that part down, but I can't figure out how the solar system actually works.

**STUDENT #1**

Now that's a doozy. I hope you like spinny rides, because we're on one right now!

### **SPIN SPIN SPIN AROUND**

**SUN**

WHO'S IN THE MIDDLE OF THE SOLAR SYSTEM?  
ME, THE SUN!

**ALL BUT SUN**

YOU, THE SUN!

**SUN**

WHO BRINGS THE LIGHT THAT YOU ARE MISSIN'?  
ME, THE SUN!

**ALL BUT SUN**

YOU, THE SUN!

**ALL**

SO RAISE YOUR VOICES LOUD, MY FRIENDS  
FOR ALL THE WARMTH THAT IT EXPENDS  
YES RAISE YOUR VOICES LOUD, MY FRIENDS  
AND SPIN SPIN SPIN AROUND.

**EARTH**

WHO ORBITS ALL THE WAY AROUND THE SUN?  
ME, THE EARTH!

**ALL BUT EARTH**

YOU, THE EARTH!

**EARTH**

WHO GIVES A PLACE TO LIVE TO EVERYONE?  
ME, THE EARTH!

**ALL BUT EARTH**

YOU, THE EARTH!

**ALL**

SO RAISE YOUR VOICES LOUD, MY FRIENDS  
FOR ALL THOSE EARTHLY DIVIDENDS  
YES RAISE YOUR VOICES LOUD, MY FRIENDS  
AND SPIN SPIN SPIN AROUND.

SUN, EARTH, AND MOON HAVE GRAVITY  
THAT KEEPS THEM ALL IN PLACE  
WHIRLIN' IN THE UNIVERSE  
WITH PATTERNS WE CAN TRACE

**MOON**

WHO ORBITS ALL THE WAY AROUND THE EARTH?  
ME, THE MOON!

**ALL BUT MOON**

YOU, THE MOON!

**MOON**

WHO'S GOT THE PHASES AND CREATES THE SURF?  
ME, THE MOON!

**ALL BUT MOON**

YOU, THE MOON!

**ALL**

SO RAISE YOUR VOICES LOUD, MY FRIENDS  
ITS MOONBEAMS AREN'T JUST PASSING TRENDS  
YES RAISE YOUR VOICES LOUD, MY FRIENDS  
AND SPIN SPIN SPIN AROUND.

AND SPIN SPIN SPIN AROUND.

**STUDENT #4**

I don't know about you, but all that spinning around makes me dizzy!

**STUDENT #5**

Really?

**STUDENT #4**

Well, actually...no. That's weird. If the earth is always spinning, why *don't* we feel dizzy?

**STUDENT #5**

That's because we're spinning right along with it...at almost a thousand miles per hour!

**STUDENT #4**

Yikes! I hope we don't get a ticket.

**STUDENT #6**

This has all been quite fascinating but what I want to know is why we have different seasons.

**STUDENT #7**

Oh, that's easy! It's a matter of taste. Some people like cumin, some like oregano.

**STUDENT #6**

I said *seasons*, not *seasonings*!

**STUDENT #7**

Oh, that's easy too! The earth's tilted just like this!

*(Tilts head to the side)*

23.5 degrees, to be exact!

**TILTED**

**ALL**

WINTER  
AND SPRING  
AND FALL  
AND SUMMERTIME YEAH

WINTER  
AND SPRING  
AND FALL  
AND SUMMERTIME YEAH

TILTED  
THE EARTH IS JUST TILTED ON ONE SIDE  
TILTED  
JUST OFF TO THE SIDE

YOU KNOW THE TILT MAKES THE SEASONS  
'CAUSE EVERY POINT IN THE YEAR  
SOME PLACES GET WAY MORE SUNLIGHT  
THAN OTHER PARTS OF THE SPHERE

WINTER  
SHORT DAYS, LONG NIGHTS  
AND COLDER WEATHER

SUMMER  
LONG DAYS, SHORT NIGHTS  
LET'S PLAY TOGETHER

TILTED  
THE EARTH IS JUST TILTED ON ONE SIDE  
TILTED  
JUST OFF TO THE SIDE

YOU KNOW THE TILT MAKES THE SEASONS  
'CAUSE EVERY POINT IN THE YEAR  
SOME PLACES GET WAY MORE SUNLIGHT  
THAN OTHER PARTS OF THE SPHERE

WINTER  
AND SPRING  
AND FALL  
AND SUMMERTIME YEAH

WINTER  
AND SPRING  
AND FALL  
AND SUMMERTIME YEAH

TILTED!

**STUDENT #8**

That was fun but let's straighten out our heads now.

*(EVERYONE grabs their heads and moves them upright.)*

**STUDENT #9**

Ah, much better. Now we can look up at the moon!

**FULL MOON**

Oh, Yay! That's us!

**HALF MOON**

Now, which phase do you think suites me best?

**STUDENTS**

Huh?

**QUARTER MOON**

We're the different moon's phases. We reflect the light from the sun back to you on earth.

**NEW MOON**

Our phase all depends on how much of our reflection you can see.

**FULL MOON**

That's right! I'm a Full Moon and I shine the brightest!

**HALF MOON**

Just because you shine the brightest, doesn't mean your the best! Hi! I'm Half moon and I guess you could say, "I'm the best of both MOONS"!

**QUARTER MOON**

I'm Quarter Moon! Please to meet your acquaintance!

**NEW MOON**

Hey! Don't forget about me!

**FULL MOON**

Sorry, New Moon but it's easy to forget about you.

**HALF MOON**

Yeah, there's not much to see.

**QUARTER MOON**

Don't feel down New Moon, we'll let you have a solo in the next song!

**NEW MOON**

**NEW MOON**

NEW MOON  
THERE'S NOT MUCH TO SEE  
REAL SOON  
THERE'S A SLICE OF ME

FULL MOON  
SHINE BRIGHT AND ROUND  
REAL SOON, REAL SOON  
I WILL SHRINK BACK DOWN.

REAL SOON, REAL SOON  
I WILL SHRINK BACK DOWN.

**ALL**

NEW MOON  
THERE'S NOTHING TO SEE  
REAL SOON  
THERE'S A SLIVER OF ME

FULL MOON  
I JUST MIGHT BURST  
REAL SOON, REAL SOON  
I'LL GO IN REVERSE.

REAL SOON, REAL SOON  
I'LL GO IN REVERSE.

THESE ARE THE SIMPLE LUNAR FACTS  
I WAX AND WANE AND WANE AND WAX  
IT TAKES ME ALMOST THIRTY DAYS  
I GUESS I'M IN A LUNAR PHASE.

NEW MOON  
THERE'S NOT MUCH TO SEE  
REAL SOON  
THERE'S A SLICE OF ME

FULL MOON  
SHINE BRIGHT AND ROUND  
REAL SOON, REAL SOON  
I WILL SHRINK BACK DOWN.

REAL SOON, REAL SOON  
I WILL SHRINK BACK DOWN.

**STUDENT #10**

The moon sure is beautiful, but I love stargazing best of all.

**STUDENT #11**

Me too! I like trying to find the constellations.

**STUDENT #12**

Look, there's the Social Media Influencer! And the Great Taco!

**STUDENT #13**

Those aren't real constellations! You made that up.

**STUDENT #12**

Why not? People around the world have always named constellations after their own stories and culture.

**STUDENT #14**

That's a good point. I just wish the stars were always out.

**STUDENT #15**

Oh, they are! We just can't see them during the day because OUR star, the sun, is so bright.



## WE'RE STARS

### ALL

WE'RE STARS  
AND WE SHINE SO BRIGHT

WE'RE STARS  
TWINKLING EVERY NIGHT  
BUT DID YOU KNOW WE'RE THERE IN DAYTIME TOO?

WE'RE STARS  
OH IT'S SUCH A CRIME

'CAUSE STARS  
ARE OUT ALL THE TIME  
BUT THE SUN'S TOO BRIGHT AND OUR LIGHT CAN'T GET THROUGH.

WE'RE NUCLEAR POWERED GIANT MASSES  
WE'RE LUMINOUS BALLS OF FIERY GASSES

EVERY NIGHT  
THINGS ARE RIGHT  
BUT IN BETWEEN WE CANNOT BE SEEN!

WE'RE STARS  
WE DON'T LIKE TO FUSS

BUT THE SUN  
WELL, HE'S JUST LIKE US  
A STAR WHO'S JUST MUCH CLOSER THAN WE ARE.

THAT SUN  
THINKS HE OWNS THE DAY

'CAUSE WE  
ARE SO FAR AWAY  
SO LET HIM SHINE; WE WILL NOT FRET

AT SOME POINT HE WILL HAVE TO SET  
THEN WE WILL RULE THE NIGHT,  
YOU BET WE'RE STARS!

**STUDENT #16**

Wow! Look at that huge star!

**STUDENT #17**

That's not a star.

**STUDENT #18**

The aliens are coming!

**STUDENT #19**

Maybe it's a really really ginormous glowing pigeon.

**STUDENT #20**

It's not an alien and it's not a pigeon! That's Venus. It's a planet.

**STUDENT #16**

A planet? How can you tell?

**STUDENT #20**

Because stars make their own light, so they twinkle. Planets are like the moon; they reflect the sun's light.

**STUDENT #17**

How come that planet wasn't there last night?

**STUDENT #20**

Planets have their own patterns too. They're not always visible from Earth.

**STUDENT #18**

Well, how many planets are there in our solar system?

**STUDENT #20**

Let's see...Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune...Eight!

**STUDENT #19**

Sounds like quite a crew! Let's sing a song about each one!

**STUDENT #20**

Yeah, that should only take another two hours!

**STUDENT #16**

What if we combined them all into one song.

**STUDENTS**

Great idea!

## EIGHT GREAT PLANETS

### **SOLO**

MERCURY AND VENUS  
EARTH AND MARS  
FLYING IN THEIR ORBIT  
'ROUND A STAR.  
JUPITER AND SATURN  
WHAT A VIEW!  
URANUS AND NEPTUNE  
WHAT A CREW.

### **ALL**

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WHAT A VIEW!  
URANUS AND NEPTUNE  
WHAT A CREW.

SOLAR SOLAR  
SOLAR SYSTEM  
EIGHT GREAT PLANETS  
I CAN'T RESIST 'EM.

THERE ARE METEORS, METEORS  
COMETS AND ASTEROIDS AS WELL...

BUT I LOVE THOSE PLANETS MOST  
CAN'T YOU TELL?  
CAN'T YOU TELL?

MERCURY AND VENUS  
EARTH AND MARS  
FLYING IN THEIR ORBIT  
'ROUND A STAR.  
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CAN'T YOU TELL?  
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URANUS AND NEPTUNE  
WHAT A CREW.

URANUS AND NEPTUNE  
WHAT A CREW.

URANUS AND NEPTUNE  
WHAT A CREW.

**STUDENT #21**

Hey, I thought there used to be a ninth planet.

**STUDENT #22**

Yeah, what about Pluto?

**STUDENT #23**

SHHH! Don't let Pluto hear you say that. It's a very sore subject. It's better if you don't bring it up. Trust me.

**PLUTO**

Hey! I heard that! Please sing a song about me. Pleeeeease! I'm small. I'm cold. I'm four billion miles from the sun. I'm LONELY!

**STUDENT #23**

Pluto. You know you're not supposed to be here.

**PLUTO**

It's because I'm not an official planet anymore, isn't it?

**STUDENT #23**

Well...yes.

**PLUTO**

I KNEW it! You'll be sorry. I'm famous! Walt Disney named a dog after me, you know!

**STUDENT #23**

Sorry about that. Pluto's had a tough time adjusting. Okeedokee, everybody. Our show is almost over but it looks like we have time for one last song! Hit it!

**PATTERNS IN THE SKY REPRISE**

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