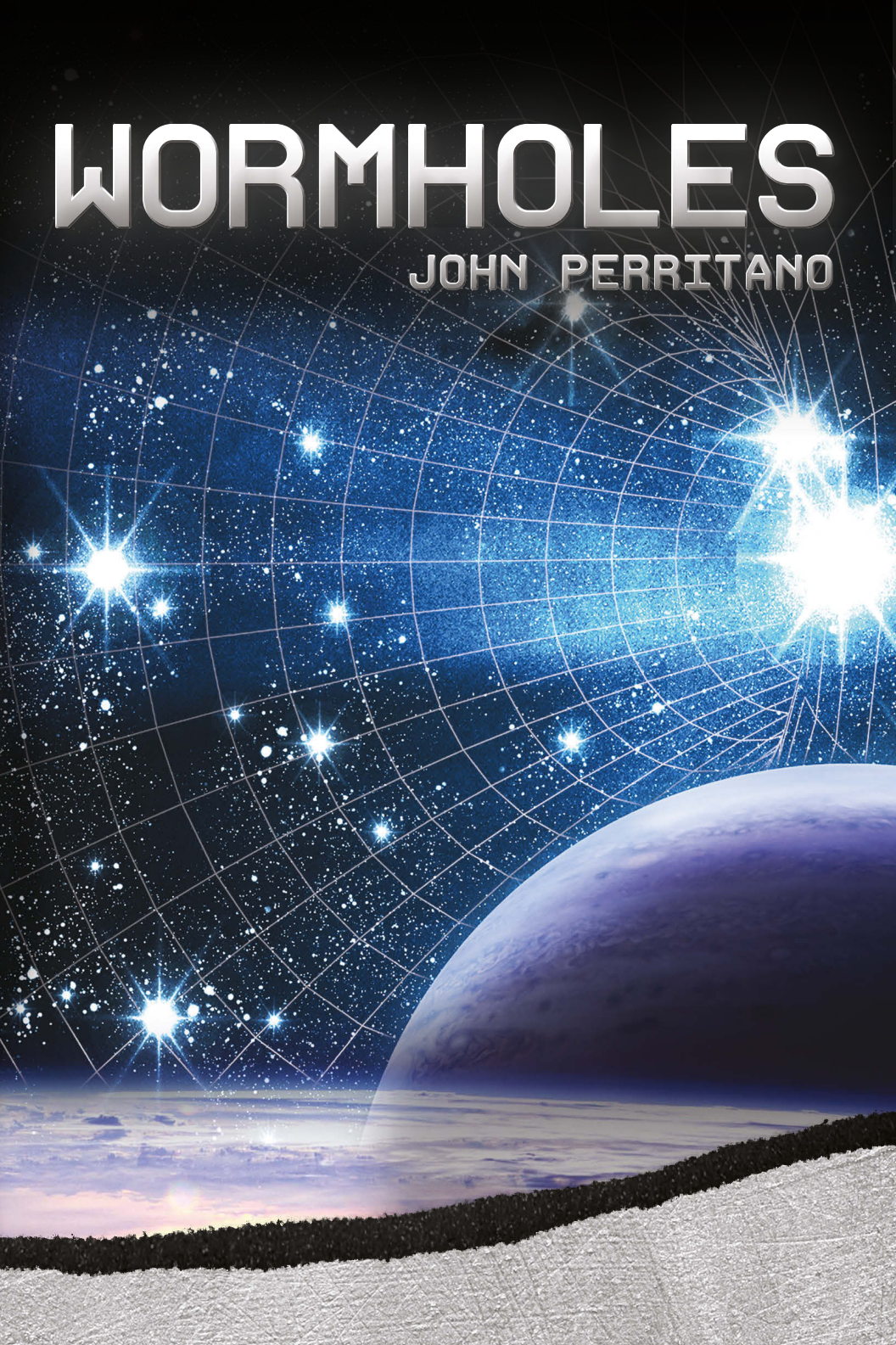

WORMHOLES
JOHN PERRITANO

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## Chapter 1
# A NEW WAY TO TRAVEL

Someone from NASA speaks.
They give a countdown.
"Three, two, one . . . liftoff!"
This is for a ***space shuttle***.
Rockets on it roar.
There is rattling and shaking.
Slowly, it climbs.

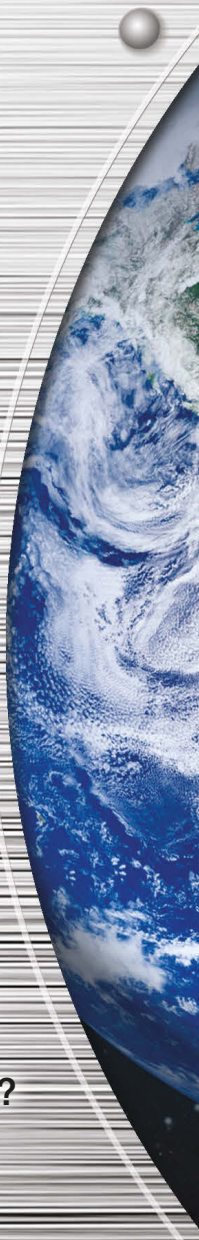
It lifts into the sky.
Then it goes higher and faster.
***Astronauts*** sit inside.
The sky looks blue to them.
Quickly, the color changes.
Soon the sky is black.

***Outer space*** is dark.
But stars shine all around.
Earth is seen below.
The shuttle soars.

Where is it going?
It may be to another ***galaxy***.
Someday, this could happen.

But other galaxies are far from Earth.
One is two million light-years away.
That is almost six trillion miles.
A light-year measures distance.
This is how far light travels in one year.

Nothing is faster than light.
It goes over 186,000 miles per second.
Not even a rocket is quicker.
How might so many light-years be traveled?





## AMAZING SCIENCE

Light travels around Earth more than seven times in one second.

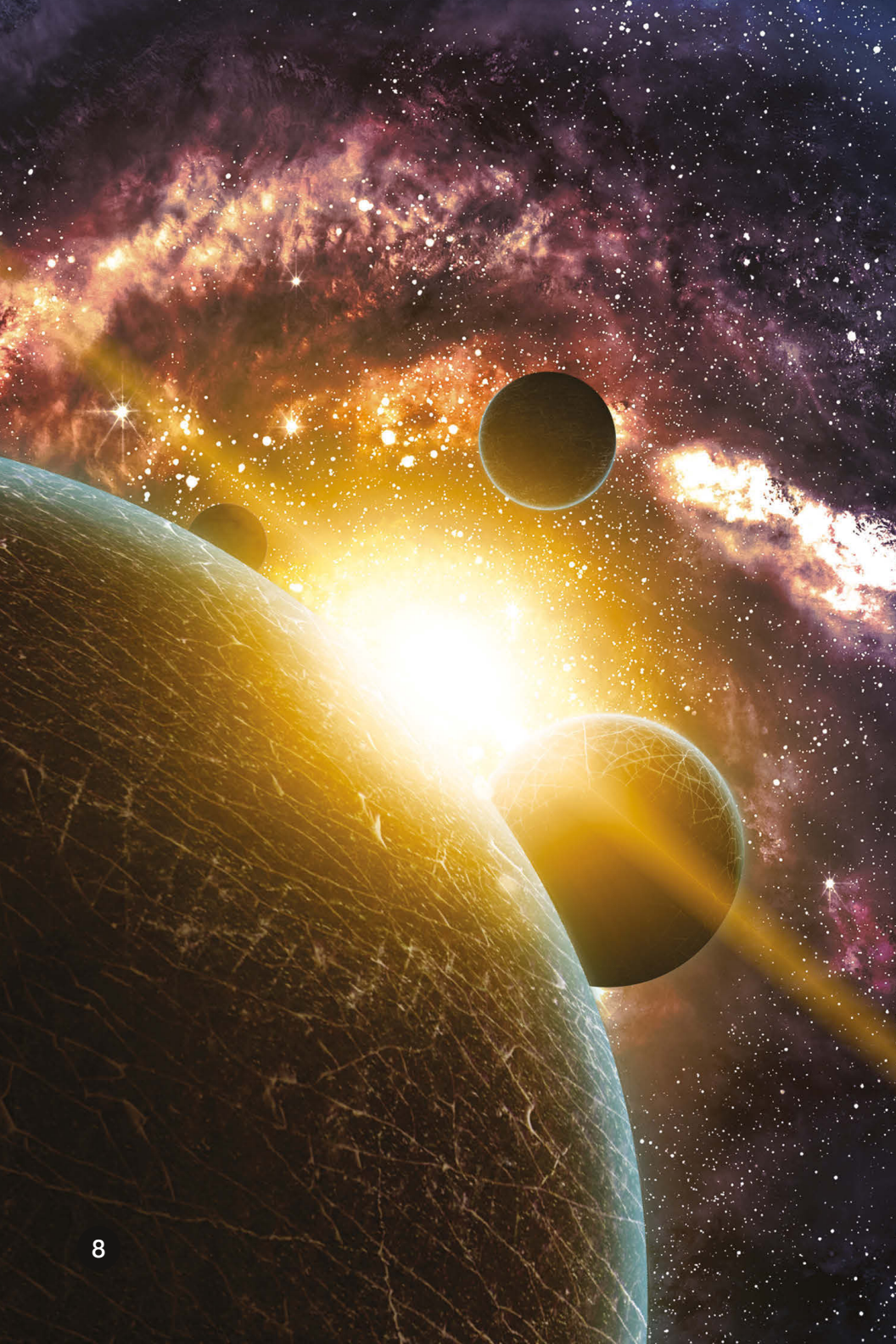


There would be a ***shortcut***.
This is a ***wormhole***.
It would be near Earth.
A shuttle could enter it.
Where would the shuttle exit?
That may be in another galaxy.



Space travel made fast and easy

Space is not empty.
It has planets and ***comets***.
***Asteroids*** are there.
More objects are too.
How do we know?
People have seen them.





But no one has seen a wormhole.
Are they real?
We do not know.
Some think they are.

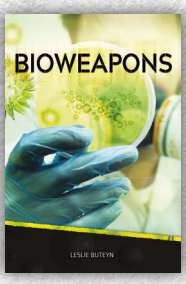
Wormholes could change lives.
The ***universe*** is ***vast***.
No one can cross it.
That would take 225 trillion years.
Time travel has not been done either.
But those facts may change.
A wormhole could help.

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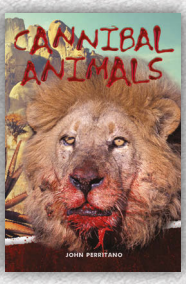
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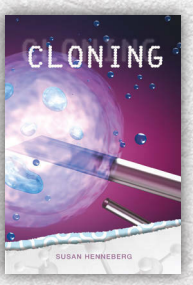

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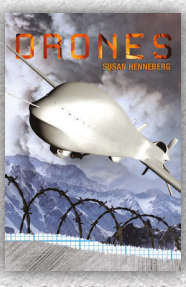

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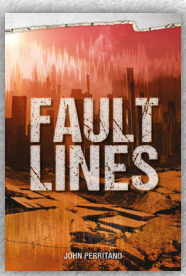

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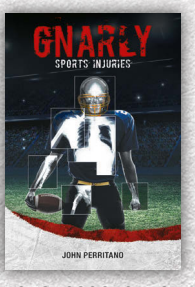

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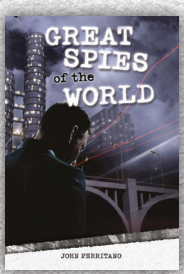

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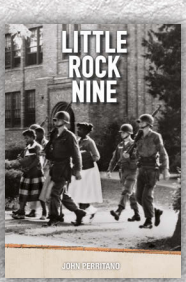

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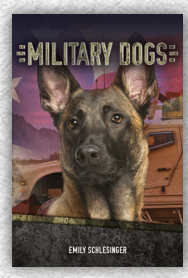

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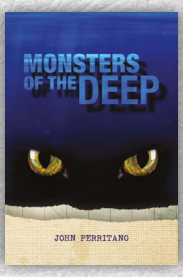

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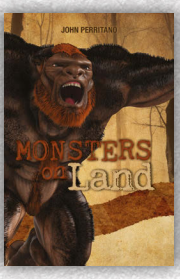
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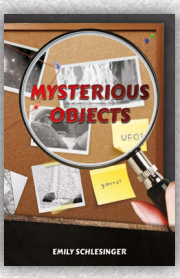

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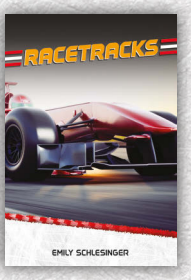

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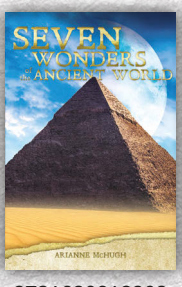

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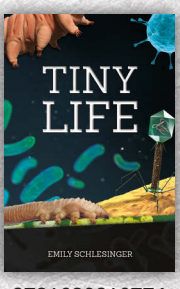

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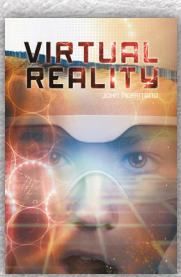

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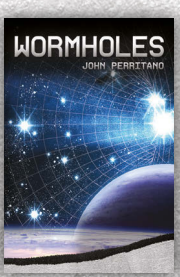

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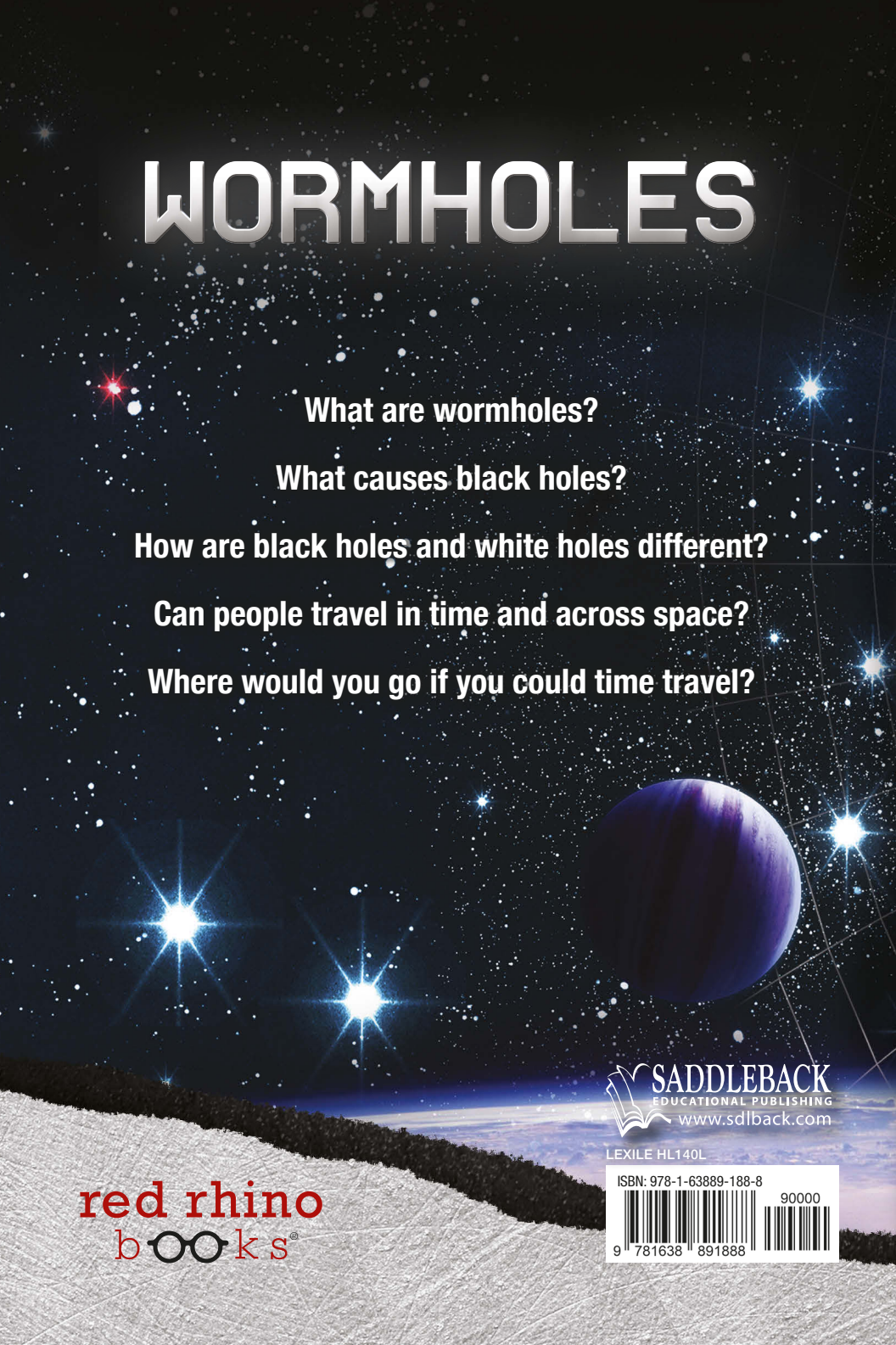



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# WORMHOLES



What are wormholes?

What causes black holes?

How are black holes and white holes different?

Can people travel in time and across space?

Where would you go if you could time travel?

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