"The ITV - Broadcaster"

School District of Manatee County Instructional Television – 1st Quarter Program Guide August 12th, 2019 – October 11th, 2019

Editor - Susan Gilbank

ITV Broadcasts on five channels to 55+ sites in the Manatee County School District. If you have any questions regarding program scheduling, please call 751-6550, x2147

The ITV crew includes Matt Messenger, Nick Bachelder, Steven Opauski, Michael Trimboli and Susan Gilbank.

ITV Channel 5 will be showing MSTV. Go to http://mstv.us for the daily schedule. MSTV also shows on Spectrum Channel 646 and Frontier Channel 39.

ITV Channel 7 will carry the Florida Channel via satellite for educational updates & decisions by our State's legislation.

ITV Channel 9 will carry: Prime Radicals, Algebra *N*spirations, Between the Lions, Wild Kratts, What's Up in Space?, All Aboard, Creature Features, Sesame English, Look & Learn, Super Why, 20th Century Presidents, Continents of the World, Wildfiles, Rivers of North America and Learn Our History.

ITV Channel 11 will show programs having little longer running times geared toward the middle & high school audience: NOVA, Mechanical Universe, Geometry Applications, Rocks of Ages and Language of Business.

ITV Channel 13 will continue to be dedicated to broadcasting NASA via satellite or for special program requests by teachers.

WEEKS AND DATES

Week 1: August 12 - 16

Week 2: August 19 - 23

Week 3: August 26 - 30

Week 4: September 3 - 6

Week 5: September 9 - 13

Week 6: September 16 - 20

Week 7: September 23 - 27

Week 8: September 30 - October 4

Week 9: October 7 - 11



Studio Corner

Televising the Apollo 11 Spacewalk

Spanning the distance of 239,000 miles, live video enabled more than half a billion people to witness Neil Armstrong set foot on the moon on July 20, 1969. Not wanting to miss out on televising the beginning of a new era of space exploration, NASA contracted with Westinghouse to build that Apollo lunar TV camera.

Beginning in the fall of 1964, under the leadership of Project Manager Stan Lebar, the Westinghouse team began design on the \$1,000,000 camera that would eventually be successful in producing that now iconic video of our first spacewalk. That camera still sits on the moon.

To learn more about the trials faced in the development of the lunar camera with all it's necessary specs on this 50th anniversary of the Apollo 11 moon landing, go to www.tvtechnology.com and search under "News" for "TV's Longest Ever Remote Remembered" by James E. O'Neal.

Susan Gilbank Instructional Television Program Specialist

** Channel 9 Programming **

20th Century Presidents	Gr. 4-12	Continents of the World G	r. 4-12
Mon. 2:00pm Tues. 11:00am W	/ed. 9:30am	Mon. 9:00am Tues. 12:30pm Wed.	1:30pm
Thurs. 2:30pm Fri. 10:00	0am	Thurs. 10:30am Fri. 12:00pm	ı
Wk. 1 Theodore Roosevelt (1901-1909)	15 min.	Wk. 1 North America	21 min.
Wk. 2 William Howard Taft (1909-1913)	11 min.	Wk. 2 South America	17 min.
Wk. 3 Woodrow Wilson (1913-1921)	15 min.	Wk. 3 Antarctica	16 min.
Wk. 4 Warren G. Harding (1921-1923)	10 min.	Wk. 4 Australia	20 min
Wk. 5 Calvin Coolidge (1923-1929)	12 min.	Wk. 5 Africa	18 min.
Wk. 6 Herbert Hoover (1929-1933)	12 min.	Wk. 6 Asia	18 min.
Wk. 7 Franklin D. Roosevelt (1933-1945)	20 min.	Wk. 7 Europe	18 min.
Wk. 8 Harry S. Truman (1945-1953)	20 min.	Wk. 8 North America	21 min.
Wk. 9 Dwight D. Eisenhower (1953-1961)	20 min.	Wk. 9 South America	17 min.
Algebra Nspirations	Gr. 7-12	<u></u>	Gr. 5-12
•	/ed. 11:00am		10:00am
Thurs. 1:30pm Fri. 2:00p	pm	Thurs. 2:00pm Fri. 9:30am	
Wk. 1 Solving Systems of Equations	28 min.	Wk. 1 The Hudson River	23 min.
Wk. 2 Relations & Functions	28 min.	Wk. 2 The Upper Mississippi River	23 min.
Wk. 3 Linear Functions, Equations & Graphs	28 min.	Wk. 3 The Lower Mississippi River	25 min.
Wk. 4 Variable Equations & Functions	25 min.	Wk. 4 The Indian River/Intercoastal Waterwa	y 24 min.
Wk. 5 Solving Inequalities in 1 & 2 Variables	27 min.	Wk. 5 The Arkansas River	, 24 min.
Wk. 6 Rational Functions & Expressions	29 min.	Wk. 6 The Sacramento & American Rivers	24 min.
Wk. 7 Exponents & Exponential Functions	27 min.	Wk. 7 The Rio Grande River	22 min.
Wk. 8 Quadratic Functions, Equations & Gra	phs 26 min.	Wk. 8 The Potomac River	24 min.
Wk. 9 Logarithms & Logarithmic Functions	31 min.	Wk. 9 The Columbia & Snake Rivers	25 min.
Wild Kratts Gr. K- Mon. 11:30am Tues. 2:30pm Wo Thurs. 12:30pm Fri. 11:00	ed. 10:30am	Learn Our History Gr. H. Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm	K-4 1:00pm
Mon. 11:30am Tues. 2:30pm Wo Thurs. 12:30pm Fri. 11:00	ed. 10:30am 0am	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm	1:00pm
Mon. 11:30am Tues. 2:30pm Wo Thurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens	ed. 10:30am	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance	
Mon. 11:30am Tues. 2:30pm Wo Thurs. 12:30pm Fri. 11:00	ed. 10:30am 0am 30 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence	1:00pm 27 min.
Mon. 11:30am Tues. 2:30pm Wo Thurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web	ed. 10:30am 0am 30 min. 30 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance	1:00pm 27 min. 23 min.
Mon. 11:30am Tues. 2:30pm Work Thurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day	ed. 10:30am 0am 30 min. 30 min. 30 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom	1:00pm 27 min. 23 min. 23 min.
Mon. 11:30am Tues. 2:30pm Work Thurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room	ed. 10:30am 0am 30 min. 30 min. 30 min. 30 min. 30 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights	1:00pm 27 min. 23 min. 23 min. 25 min.
Mon. 11:30am Tues. 2:30pm Work Thurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day	ed. 10:30am 0am 30 min. 30 min. 30 min. 30 min. 30 min. 30 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery	27 min. 23 min. 23 min. 25 min. 20 min.
Mon. 11:30am Tues. 2:30pm Work Thurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room Wk. 6 Zig-Zagged	ed. 10:30am 0am 30 min. 30 min. 30 min. 30 min. 30 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights Wk. 6 A Tribute to Our Brave Military	1:00pm 27 min. 23 min. 23 min. 25 min. 20 min. 25 min.
Mon. 11:30am Tues. 2:30pm Work Thurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room Wk. 6 Zig-Zagged Wk. 7 Bugs or Monkeys	ed. 10:30am 0am 30 min. 30 min. 30 min. 30 min. 30 min. 30 min. 30 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights Wk. 6 A Tribute to Our Brave Military Wk. 7 A History of Sports in America	1:00pm 27 min. 23 min. 23 min. 25 min. 20 min. 25 min. 21 min.
Mon. 11:30am Tues. 2:30pm Worthurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room Wk. 6 Zig-Zagged Wk. 7 Bugs or Monkeys Wk. 8 Termites vs. Tongues Wk. 9 Musk Ox Mania	ed. 10:30am 0am 30 min. 30 min. 30 min. 30 min. 30 min. 30 min. 30 min. 30 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights Wk. 6 A Tribute to Our Brave Military Wk. 7 A History of Sports in America Wk. 8 Ladies of Liberty	1:00pm 27 min. 23 min. 23 min. 25 min. 20 min. 25 min. 21 min. 21 min.
Mon. 11:30am Tues. 2:30pm Work Thurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room Wk. 6 Zig-Zagged Wk. 7 Bugs or Monkeys Wk. 8 Termites vs. Tongues Wk. 9 Musk Ox Mania	ed. 10:30am 0am 30 min. 30 min. 30 min. 30 min. 30 min. 30 min. 30 min. 30 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights Wk. 6 A Tribute to Our Brave Military Wk. 7 A History of Sports in America Wk. 8 Ladies of Liberty Wk. 9 The Adventures of Lewis & Clark	1:00pm 27 min. 23 min. 23 min. 25 min. 20 min. 25 min. 21 min. 21 min.
Mon. 11:30am Tues. 2:30pm Worthurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room Wk. 6 Zig-Zagged Wk. 7 Bugs or Monkeys Wk. 8 Termites vs. Tongues Wk. 9 Musk Ox Mania What's Up in Space Mon. 12:15pm Tues. 9:30am W Thurs. 1:00pm Fri. 1:45pm	ed. 10:30am 30 min. Gr. K-2 /ed. 11:45am m	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights Wk. 6 A Tribute to Our Brave Military Wk. 7 A History of Sports in America Wk. 8 Ladies of Liberty Wk. 9 The Adventures of Lewis & Clark Wildfiles Gr. 3-8 Mon. 1:00pm Tues. 11:30am Wed. Thurs. 9:30am Fri. 12:30pm	1:00pm 27 min. 23 min. 23 min. 25 min. 20 min. 21 min. 21 min. 21 min. 21 min.
Mon. 11:30am Tues. 2:30pm Work Thurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room Wk. 6 Zig-Zagged Wk. 7 Bugs or Monkeys Wk. 8 Termites vs. Tongues Wk. 9 Musk Ox Mania What's Up in Space Mon. 12:15pm Tues. 9:30am W Thurs. 1:00pm Fri. 1:45pt	ed. 10:30am 30 min. 40 min. 40 min. 41 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights Wk. 6 A Tribute to Our Brave Military Wk. 7 A History of Sports in America Wk. 8 Ladies of Liberty Wk. 9 The Adventures of Lewis & Clark Wildfiles Gr. 3-8 Mon. 1:00pm Tues. 11:30am Wed. Thurs. 9:30am Fri. 12:30pm Wk. 1 Tale of the Giant Beaver	1:00pm 27 min. 23 min. 23 min. 25 min. 20 min. 21 min. 21 min. 21 min. 21 min. 22 min. 23 min.
Mon. 11:30am Tues. 2:30pm Worthurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room Wk. 6 Zig-Zagged Wk. 7 Bugs or Monkeys Wk. 8 Termites vs. Tongues Wk. 9 Musk Ox Mania What's Up in Space Mon. 12:15pm Tues. 9:30am W Thurs. 1:00pm Fri. 1:45pm Wk. 1 Earth Wk. 2 Exploring Space	ed. 10:30am 30 min. 40 min. 41 min. 42 min. 42 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights Wk. 6 A Tribute to Our Brave Military Wk. 7 A History of Sports in America Wk. 8 Ladies of Liberty Wk. 9 The Adventures of Lewis & Clark Wildfiles Gr. 3-8 Mon. 1:00pm Tues. 11:30am Wed. Thurs. 9:30am Fri. 12:30pm Wk. 1 Tale of the Giant Beaver Wk. 2 You Say Buffalo, I Say Bison	1:00pm 27 min. 23 min. 23 min. 25 min. 20 min. 21 min. 21 min. 21 min. 21 min. 23 min. 23 min.
Mon. 11:30am Tues. 2:30pm Worthurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room Wk. 6 Zig-Zagged Wk. 7 Bugs or Monkeys Wk. 8 Termites vs. Tongues Wk. 9 Musk Ox Mania What's Up in Space Mon. 12:15pm Tues. 9:30am W Thurs. 1:00pm Fri. 1:45pm Wk. 1 Earth Wk. 2 Exploring Space Wk. 3 Mars	ed. 10:30am 30 min. 40 min. 41 min. 42 min. 12 min. 12 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights Wk. 6 A Tribute to Our Brave Military Wk. 7 A History of Sports in America Wk. 8 Ladies of Liberty Wk. 9 The Adventures of Lewis & Clark Wildfiles Gr. 3-8 Mon. 1:00pm Tues. 11:30am Wed. Thurs. 9:30am Fri. 12:30pm Wk. 1 Tale of the Giant Beaver Wk. 2 You Say Buffalo, I Say Bison Wk. 3 Feather of Hope	1:00pm 27 min. 23 min. 23 min. 25 min. 20 min. 21 min. 21 min. 21 min. 21 min. 23 min. 23 min. 23 min. 23 min. 23 min.
Mon. 11:30am Tues. 2:30pm Worthurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room Wk. 6 Zig-Zagged Wk. 7 Bugs or Monkeys Wk. 8 Termites vs. Tongues Wk. 9 Musk Ox Mania What's Up in Space Mon. 12:15pm Tues. 9:30am W Thurs. 1:00pm Fri. 1:45pm Wk. 1 Earth Wk. 2 Exploring Space Wk. 3 Mars Wk. 4 The Moon	ed. 10:30am 30 min. 40 min. 41:45am 42 min. 12 min. 12 min. 12 min. 12 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights Wk. 6 A Tribute to Our Brave Military Wk. 7 A History of Sports in America Wk. 8 Ladies of Liberty Wk. 9 The Adventures of Lewis & Clark Wildfiles Gr. 3-8 Mon. 1:00pm Tues. 11:30am Wed. Thurs. 9:30am Fri. 12:30pm Wk. 1 Tale of the Giant Beaver Wk. 2 You Say Buffalo, I Say Bison Wk. 3 Feather of Hope Wk. 4 Arachnophobia on the Loose	1:00pm 27 min. 23 min. 23 min. 25 min. 20 min. 21 min. 21 min. 21 min. 21 min. 23 min. 23 min. 23 min. 23 min. 23 min. 23 min.
Mon. 11:30am Tues. 2:30pm Worthurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room Wk. 6 Zig-Zagged Wk. 7 Bugs or Monkeys Wk. 8 Termites vs. Tongues Wk. 9 Musk Ox Mania What's Up in Space Mon. 12:15pm Tues. 9:30am W Thurs. 1:00pm Fri. 1:45pm Wk. 1 Earth Wk. 2 Exploring Space Wk. 3 Mars Wk. 4 The Moon Wk. 5 Planets	ed. 10:30am 30 min. 40 min. 41:45am 42 min. 42 min. 42 min. 12 min. 12 min. 12 min. 12 min. 12 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights Wk. 6 A Tribute to Our Brave Military Wk. 7 A History of Sports in America Wk. 8 Ladies of Liberty Wk. 9 The Adventures of Lewis & Clark Wildfiles Gr. 3-8 Mon. 1:00pm Tues. 11:30am Wed. Thurs. 9:30am Fri. 12:30pm Wk. 1 Tale of the Giant Beaver Wk. 2 You Say Buffalo, I Say Bison Wk. 3 Feather of Hope Wk. 4 Arachnophobia on the Loose Wk. 5 You Go, Caribou	1:00pm 27 min. 23 min. 23 min. 25 min. 20 min. 21 min. 21 min. 21 min. 21 min. 23 min.
Mon. 11:30am Tues. 2:30pm Worthurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room Wk. 6 Zig-Zagged Wk. 7 Bugs or Monkeys Wk. 8 Termites vs. Tongues Wk. 9 Musk Ox Mania What's Up in Space Mon. 12:15pm Tues. 9:30am W Thurs. 1:00pm Fri. 1:45pm Wk. 1 Earth Wk. 2 Exploring Space Wk. 3 Mars Wk. 4 The Moon Wk. 5 Planets Wk. 6 Stars	ed. 10:30am 30 min. 40 min. 12 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights Wk. 6 A Tribute to Our Brave Military Wk. 7 A History of Sports in America Wk. 8 Ladies of Liberty Wk. 9 The Adventures of Lewis & Clark Wildfiles Gr. 3-8 Mon. 1:00pm Tues. 11:30am Wed. Thurs. 9:30am Fri. 12:30pm Wk. 1 Tale of the Giant Beaver Wk. 2 You Say Buffalo, I Say Bison Wk. 3 Feather of Hope Wk. 4 Arachnophobia on the Loose Wk. 5 You Go, Caribou Wk. 6 Strong as a Muskox	1:00pm 27 min. 23 min. 23 min. 25 min. 20 min. 21 min. 21 min. 21 min. 21 min. 23 min.
Mon. 11:30am Tues. 2:30pm Worthurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room Wk. 6 Zig-Zagged Wk. 7 Bugs or Monkeys Wk. 8 Termites vs. Tongues Wk. 9 Musk Ox Mania What's Up in Space Mon. 12:15pm Tues. 9:30am W Thurs. 1:00pm Fri. 1:45pm Wk. 2 Exploring Space Wk. 3 Mars Wk. 4 The Moon Wk. 5 Planets Wk. 6 Stars Wk. 7 The Sun	ed. 10:30am 30 min. 40 min. 12 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights Wk. 6 A Tribute to Our Brave Military Wk. 7 A History of Sports in America Wk. 8 Ladies of Liberty Wk. 9 The Adventures of Lewis & Clark Wildfiles Gr. 3-8 Mon. 1:00pm Tues. 11:30am Wed. Thurs. 9:30am Fri. 12:30pm Wk. 1 Tale of the Giant Beaver Wk. 2 You Say Buffalo, I Say Bison Wk. 3 Feather of Hope Wk. 4 Arachnophobia on the Loose Wk. 5 You Go, Caribou Wk. 6 Strong as a Muskox Wk. 7 Owl for One, One for Owl	1:00pm 27 min. 23 min. 25 min. 20 min. 25 min. 21 min. 21 min. 21 min. 21 min. 23 min.
Mon. 11:30am Tues. 2:30pm Worthurs. 12:30pm Fri. 11:00 Wk. 1 The Attack of the Tree Eating Aliens Wk. 2 Secrets of the Spider's Web Wk. 3 Let the Rhinos Roll! Wk. 4 Bad Hair Day Wk. 5 Elephant in the Room Wk. 6 Zig-Zagged Wk. 7 Bugs or Monkeys Wk. 8 Termites vs. Tongues Wk. 9 Musk Ox Mania What's Up in Space Mon. 12:15pm Tues. 9:30am W Thurs. 1:00pm Fri. 1:45pm Wk. 1 Earth Wk. 2 Exploring Space Wk. 3 Mars Wk. 4 The Moon Wk. 5 Planets Wk. 6 Stars	ed. 10:30am 30 min. 40 min. 12 min.	Mon. 11:00am Tues. 2:00pm Wed. Thurs. 10:00am Fri. 2:30pm Wk. 1 The Pledge of Allegiance Wk. 2 Declaration of Independence Wk. 3 Winning Our Freedom Wk. 4 Columbus & the Great Discovery Wk. 5 The Constitution & the Bill of Rights Wk. 6 A Tribute to Our Brave Military Wk. 7 A History of Sports in America Wk. 8 Ladies of Liberty Wk. 9 The Adventures of Lewis & Clark Wildfiles Gr. 3-8 Mon. 1:00pm Tues. 11:30am Wed. Thurs. 9:30am Fri. 12:30pm Wk. 1 Tale of the Giant Beaver Wk. 2 You Say Buffalo, I Say Bison Wk. 3 Feather of Hope Wk. 4 Arachnophobia on the Loose Wk. 5 You Go, Caribou Wk. 6 Strong as a Muskox	1:00pm 27 min. 23 min. 23 min. 25 min. 20 min. 21 min. 21 min. 21 min. 21 min. 23 min.

** Channel 9 Programming **

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Super Why		<u>Creature Features</u>	
Mon. 1:30pm Tues. 10:30a	•	•	ed. 2:15pm
Thurs. 9:00am Fri	. 1:00pm	Thurs. 3:15pm Fri. 10:30a	m
Wk. 1 Hansel & Gretel	25 min.	Wk. 1 Lady Bugs	5 min.
Wk. 2 Jack & the Beanstalk	25 min.	Wk. 2 Leaf Beetles	5 min.
Wk. 3 Little Red Riding Hood	25 min.	Wk. 3 Spiders	5 min.
Wk. 4 The Three Little Pigs	25 min.	Wk. 4 Ants	5 min.
Wk. 5 The Princess & the Pea	25 min.	Wk. 5 Crickets	5 min.
Wk. 6 Pinocchio	25 min.	Wk. 6 Mosquitoes	5 min.
Wk. 7 Rumpelstiltskin	25 min.	Wk. 7 Praying Mantis	5 min.
Wk. 8 Cinderella	25 min.	Wk. 8 Bees & Wasps	5 min.
Wk. 9 Humpty Dumpty	25 min.	Wk. 9 Cicadas	5 min.
All Aboard	Gr 5-12	Between the Lions	Gr. K-3
Mon. 10:00am Tues. 1:30p			d. 12:30pm
•	ri. 11:30pm	Thurs. 11:00am Fri. 3:00pm	•
Wk. 1 Amtrak Empire Builder	27 min.	Wk. 1 The Lost Rock	27 min.
Wk. 2 Michigan Fast Freight	27 min.	Wk. 2 Stop that Pickle/Chicks & Salsa	27 min.
Wk. 3 Sante Fe Odyssey	27 min.	Wk. 3 Ruby Sings the Blues/The Camel Da	
Wk. 4 Rock Island Railroad	27 min.	Wk. 4 Making Bread & Cheesybreadville	27 min.
Wk. 5 Henry Ford Railroad	27 min.	Wk. 5 Being With You This Way/How to B	
Wk. 6 Narrow Gauge Passenger Cha Wk. 7 Steel Rails – Private Varnish	se 27 min. 27 min.	Wk. 6 Spicy Hots Colors/I Had the Blues Wk. 7 Bear Snores On/Night In the Counti	27 min. ry 27 min
Wk. 8 Union Pacific Super Railroad	27 min.	Wk. 8 Stone Soup/Bee-Bim Bop!	27 min.
Wk. 9 Steam in the 50's	27 min.	Wk. 9 Violet's Music/Alvin's Instrument	27 min.
Mon. 10:30am Tues. 1:00p Thurs. 11:45am F		<u> </u>	Gr. K-3 d. 11:30am n
Wk. 1 A Cute Look at Angles	15 min.	Wk. 1 Forcast: Wind	15 min.
Wk. 2 Counting Systems	15 min.	Wk. 2 All in the Family	15 min.
Wk. 3 Doubling, Halving & More	15 min.	Wk. 3 Do You Like It?	15 min.
Wk. 4 Big Numbers & the Power of		Wk. 4 Make Me a Sandwich	15 min.
Wk. 5 It's About Time	15 min.	Wk. 5 Mine	15 min.
Wk. 6 Currencies & Types of Money	15 min.	Wk. 6 Niki for President	15 min.
Wk. 7 Patterns	15 min.	Wk. 7 Tingo Meets the Band	15 min.
Wk. 8 Geometric Codes	15 min.	Wk. 8 Vegetable Soup	15 min.
Wk. 9 Mixing & Matching	15 min.	Wk. 9 What Time Is It?	15 min.
Look & Lear		Sesame English (ESL)	
Mon. 12:00pm Tues. 9:45a Thurs. 11:30am F	m Wed. 9:00am ri. 1:30pm	Mon. 10:45am Tues. 12:00pm W Thurs. 1:15pm Fri. 10:45a	ed. 9:15am am
Wk. 1 The Frog's Life Cycle	11 min.	Wk. 1 Forcast: Wind	15 min.
Wk. 2 The Mechanics of Toys	13 min.	Wk. 2 All in the Family	15 min.
Wk. 3 Building Materials	15 min.	Wk. 3 Do You Like It?	15 min.
Wk. 4 Structures	15 min.	Wk. 4 Make Me a Sandwich	15 min.
Wk. 5 Bridges	11 min.	Wk. 5 Mine	15 min.
Wk. 6 Buildings	15 min.	Wk. 6 Niki for President	15 min.
Wk. 7 Land Transport Wk. 8 Air Transport	12 min. 13 min.	Wk. 7 Tingo Meets the Band Wk. 8 Vegetable Soup	15 min. 15 min.
Wk. 9 Water Transport	16 min.	Wk. 9 What Time Is It?	15 min.
J	23 111111		25 111111

** Channel 11 Programming *

NOVA Gr. 4-12 **Language of Business** Gr. 9-12 Tues. 9:00am Tues. 10:00am Wed. 11:00am Mon. 11:30am Wed. 10:00am Mon. 12:30pm Thurs. 1:30pm Fri. 1:00pm Thurs. 12:00pm Fri. 9:00am Wk. 1 BEES: Tales from the Hive 53 min. Wk. 1 Made In USA 30 min. Wk. 2 ANTS: Little Creatures Who Run the World 53 min. Wk. 2 Disruptive Technology 30 min. Wk. 3 Ape Genius 53 min Wk. 3 Small Businesses 30 min. Wk. 4 Volcano Above the Clouds Wk. 4 Family Businesses 30 min. 53 min. Wk. 5 Lightning! 53 min. Wk. 5 Digital Marketing 30 min. Wk. 6 Roller Coaster! 53 min. Wk. 6 Art and Business 30 min. Wk. 7 The Incredible Journey of Butterflies 53 min. Wk. 7 Mass Challenge 30 min. Wk. 8 The Great Math Mystery Wk. 8 Starting a Business from Scratch 30 min. 53 min.

53 min.

Mechanical Universe Gr. 9-12

Mon. 9:00am Tues. 1:00pm Wed. 8:00am Thurs. 11:00am Fri 10:00am

Wk. 9 BEES: Tales from the Hive

Wk. 1	Velocity and Time	30 min.
Wk. 2	Energy, Momentum and Mass	30 min.
Wk. 3	Voltage , Energy and Force	30 min.
Wk. 4	Energy and Eccentricity	30 min.
Wk. 5	Gravity, Electricity and Magnetism	30 min.
Wk. 6	Static Electricity	30 min.
Wk. 7	Temperature and the Gas Laws	30 min.
Wk. 8	Vector Fields and Hydrodynamics	30 min.
Wk. 9	Particles and Waves	30 min.

Geometry Applications Gr. 4-12

Mon. 1:30pm Tues. 12:00pm Wed. 9:00am Thurs. 10:00am Fri 11:30am

Wk. 1	Points and Lines	32 min.
Wk. 2	Circles	38 min.
Wk. 3	Triangles	38 min.
Wk. 4	Angles and Planes	32 min.
Wk. 5	Area and Volume	41 min.
Wk. 6	Coordinate Geometry	37 min.
Wk. 7	Three-Dimensional Geometry	34 min.
Wk. 8	Transformations	37 min.
Wk. 9	Quadrilaterals	33 min.

Rocks of Ages Gr. 4-12

Mon. 10:30am Tues: 11:00am Wed. 1:00pm Thurs. 9:00am Fri 8:00am

Wk. 1	Basalt	54 min.
Wk. 2	Granite	53 min.
Wk. 3	Marble	54 min.
Wk. 4	Meteorites	54 min.
Wk. 5	Sandstone	58 min.
Wk. 6	Basalt	54 min.
Wk. 7	Granite	53 min.
Wk. 8	Marble	54 min.
Wk. 9	Meteorites	54 min.

Did You Know? Unbelievable Facts About the Ocean

Wk. 9 Business Pivots

Our oceans cover more than 70% of the Earth's surface. With so much of the Earth's surface taken up by the ocean, it's evident how vital these marine environments are to the planet and how much there is to still be explored.

30 min.

The majority of life on Earth is aquatic. As so much of the Earth's surface is under water, it comes as no surprise that marine species outnumber those on land. It's an incredible 94% of the Earth's living species that exist within the oceans.

Less than 5% of the planet's ocean have been explored.

According to the Ocean Service, man has explored less than 5% of Earth's oceans. As researchers strive to discover more, we're continually getting to know our oceans better.

The world's longest mountain chain is underwater. Earth's longest chain of mountains, the Mid-Ocean Ridge, is almost entirely beneath the ocean, stretching across a distance of 65,000 kilometers. It's said that this mountain chain is less explored that the surface of Venus or Mars.

Over 70% of our planet's oxygen is produced by the ocean. It's thought that between 70 & 80% of the oxygen we breath is produced by marine plants. Nearly all of which are marine algae.

There are more historic artefacts under the sea than in all the world's museums. Around 1,000 shipwrecks lie off the Florida Keys alone. Other underwater museums have been created in recent years, including the Mediterranean's submerged bronze statue, Christ of the Abyss.

We still only know a fraction of the marine species in our oceans. According to the World Register of Marine Species, there are now 240,470 accepted species, with new marine life being discovered every day.

The Pacific Ocean is the world's largest ocean. With 25,000 islands lying within it, it has more islands than anywhere else on the planet.

For more ocean facts, visit www.trafalgar.com