



GLOBAL ARTS:

Performances For Schools

Presents



Twinkle Twonkle **Friday, Feb.17, 2012 at 10am** **Fine Arts Center Concert Hall**

Study Guides for Teachers are also available on our website at www.fineartscenter.com - select *Global Arts* under *Education*, then select *Resource Room*.

Please fill out our online surveys at <http://www.umass.edu/fac/centerwide/survey/ppeef.html> Thank you!

Welcome

Information for Teachers and Parents

Our goal is to offer high quality performances for young people in a safe and comfortable setting. Please help us by following the below guidelines.



Please arrive early. You should arrive at the theatre 30 minutes prior to the noted start time. Allow for travel time, parking, being seated and bathroom visits. It is important that we begin our performances on time so that all schools can meet their lunch and/or dismissal times.



Be sure to check the location of the performance when making your bus reservations. Performances take place in the Fine Arts Center Concert Hall or Bowker Auditorium in Stockbridge Hall. Please see the map at the end of this guide for driving and drop-off instructions.



Upon arrival your group will be greeted by an usher either at your bus or in the lobby. We do not issue individual tickets for performances. Your usher will direct your group to their reserved seats.



Both theaters are accessible for Mobility Impaired members. An infrared listening system is available in both theaters. Access parking is available adjacent to the theaters. An Access permit should be clearly visible in the parked vehicle. To better meet your needs, please inform us of any special seating requirements one month prior to the performance by calling 413-545-2116.



For the comfort of all our seated patrons, we request that backpacks, lunches and other gear be left on the bus. Also, please remove all hats when seated in the theater.



Food, drinks other than water, smoking, candy and gum are all not allowed in the theater. The use of cell phones, portable music players, cameras or any other recording device, including non-flash photography and cell phone cameras, is strictly prohibited. PLEASE BE SURE TO TURN OFF ALL CELL PHONES.

Any teasing, disruptive and rude behavior by students towards each other or to others seated close-by during a performance is not acceptable. Teachers and chaperones will be held responsible for any such incident reported to the Fine Arts Center staff. All complaints received will be forwarded to the schools involved. Repeated offences from the same school/s may result in cancellation of future reservations for shows.



Theatre Etiquette

Please read and review the following information with your students.

WE expect everyone to be a good audience member.
Good audience members.....

- Are good listeners
- Keep their hands and feet to themselves
- Do not talk or whisper during the performance
- Do not eat gum, candy, food or drink in the theater
- Turn off all cell phones and do not use portable music players, cameras or any other recording devices
- Stay in their seats during the performance
- Do not disturb their neighbors or other schools in attendance

“Theatre is not theatre without an audience.”

Live theatre differs from watching television or movies. Remember that performers can see and hear you. As an audience member you are a vital contributor to the performance experience that you and those around you will have. How you behave and how you react to the show will affect the artists’ performances. That is why each performance is a unique experience, it will never be repeated exactly the same. Talking to your neighbor, sending text messages, and other similar behaviors are distracting to the rest of the audience and to the artists. Please be respectful of the artists on stage performing for you by listening quietly. Of course, it is appropriate to react to what you are seeing – some things may make you laugh, gasp out loud, or you may be asked to respond by answering questions from the performers, singing along or clapping. Most of all, it is important to be present “in the moment” by being attentive and enjoy the performance. And of course – show your enthusiastic appreciation by applause at the end of the performance!

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Curriculum Frameworks

This performance and guide provide opportunities for your students to explore a variety of topics. For your convenience we list below applicable Massachusetts learning standards. This list is by no means exhaustive. Please use this list as a guide to assist with creating lesson plans.

Science

Learning about origin of the Solar System, its Planets, and Stars & Constellations.

Art

Standard 10 *Apply knowledge of the arts to the study of history and science.*

History

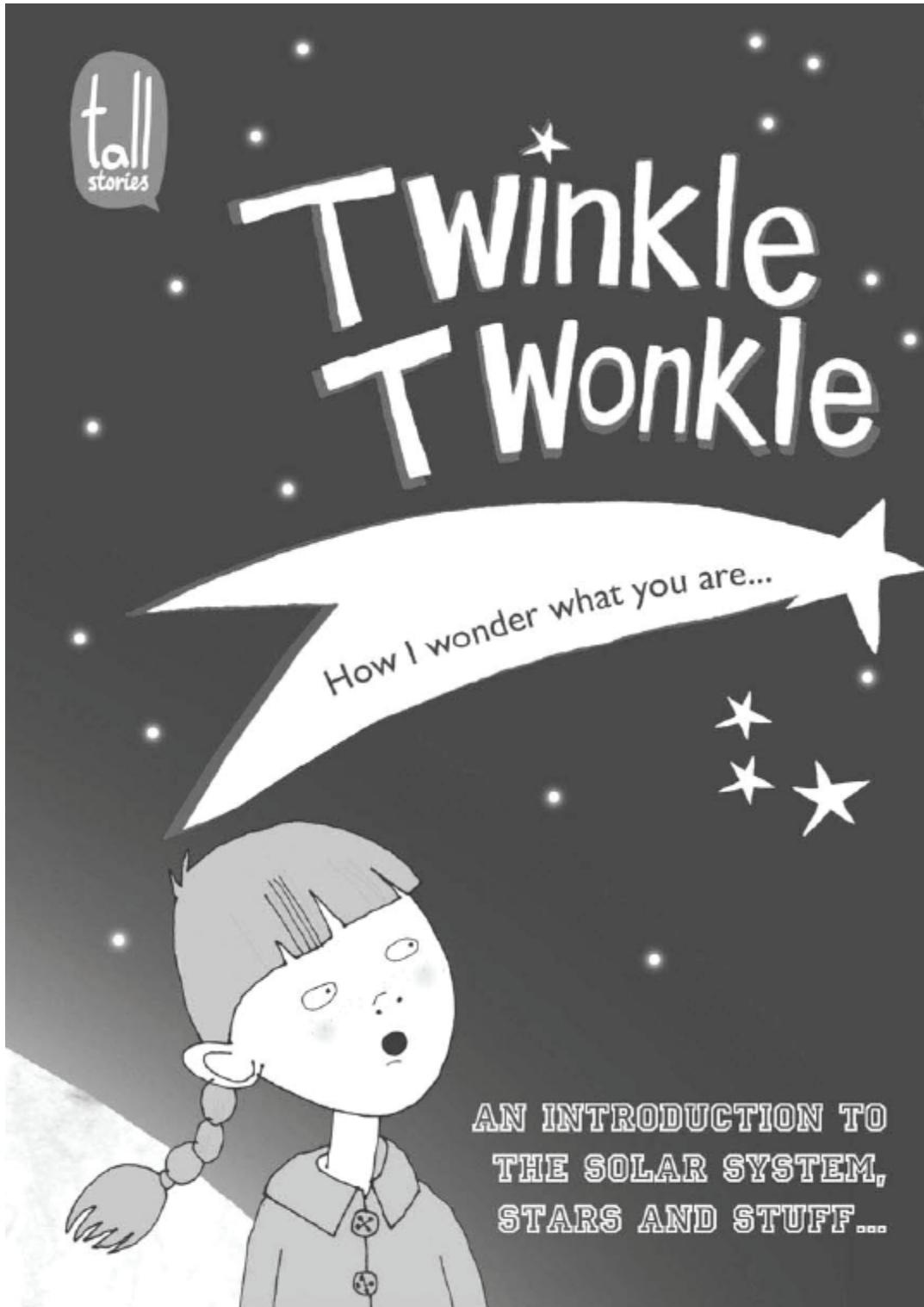
Learning about Constellations and Planet names from ancient Greeks and Romans mythology

English

Connecting traditional stories, myths and nursery rhymes with the solar system



the
Program



SUN FACTS

The Sun is... HUGE!

You could fit more than a million Earths in the Sun

The sun is really FAR AWAY!

It is about 93,000,000 miles from Earth – in a car, on a motorway with no traffic, it would take about 150 years to get there.

The sun is roughly the centre of our Solar system - all eight planets that make up our solar system – Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune – travel round the Sun.

The sun gives us our heat and light. Without it – almost all life on Earth couldn't survive.

The stars you see at night are pretty much like the Sun, only much, much further away. In fact, the next closest star is about 25 trillion miles away. A trillion is 1,000,000,000,000. It would take more than 40,000,000 years to reach it in a car... You would have to make a lot of stops to go to the loo.

Our Sun is one of a few hundred billion stars that make up our Galaxy, the Milky Way. On a clear, dark night you can sometimes see the rest of the Milky Way as a light, milky smear across the dark sky – it looks a bit like a silvery-white river running right over your head. The Milky Way is just one of more than 100 billion galaxies that make up the universe.

"It suddenly struck me that that tiny pea, pretty and blue, was earth. I put my thumb up and shut one eye and my thumb blotted out the planet earth. I didn't feel like a giant. I felt very, very small..."
Neil Armstrong, the first human to walk on the moon, on seeing the earth from the moon.

LINKS

NASA Kids: <http://www.nasa.gov>

The Royal Society: <http://royalsociety.org>

European Space Agency: <http://www.esa.int/esaKIDSen>

Tall Stories Theatre Company: <http://www.tallstories.org.uk>

With special thanks to Deirdre Black, Royal Society Dorothy Hodgkin Fellow



THE ROYAL SOCIETY

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TWINKLE TWINKLE LITTLE STAR, HOW I WONDER WHAT YOU ARE...

Have you ever looked up at the sky at night and wondered what all the little dots of light are? Have you ever looked at the moon and wondered what it is made of? Have you ever seen a shooting star and wondered where it is shooting from? And can a cow really jump over the moon?

People have always looked at the stars and moon and wondered what they are. Some native Americans believed that the stars were made by



a coyote sprinkling the sky with bright stones. To a Siberian tribe, the stars are windows that allow their gods to look down on us. The tent-dwelling people from Central Asia think the night sky is a huge tent over the earth and the stars are tiny holes in the canvas.

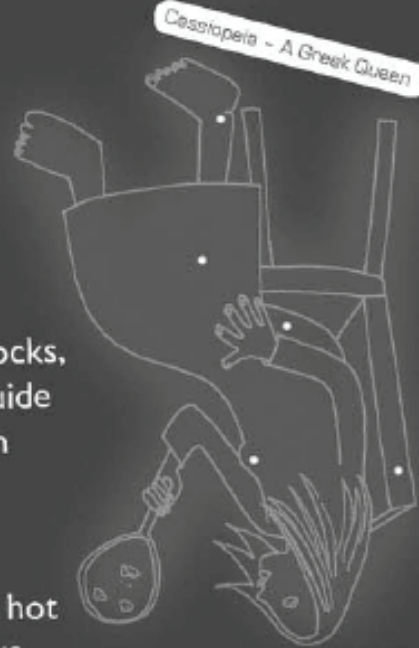


↑
hole in canvas



↑ first star I see tonight...

The ancient Greeks named collections of stars after gods, heroes and monsters from their great stories. We still know these collections of stars, or constellations, by the names the Greeks gave them. Here are a few of them...



Ancient people have used the stars as clocks, as calendars and as compasses to help guide their ships home for centuries. They even thought they could tell the future from gazing at the night sky.

But what are stars really? Stars are huge hot balls of glowing gas – so big and bright we can see them from trillions of miles away.

There is one star that is closer to earth and so seems much brighter. It is so bright that it lights up the whole sky and gives us our daylight... the sun.
See the back page for almighty sun facts!

DON'T FORGET TO LOOK OUT FOR YOUR FIRST STAR TONIGHT & MAKE A WISH!


CAN YOU JOIN THE STARS TO MAKE CONSTELLATIONS?
(like dot to dot!)

BUT HOW DID IT ALL BEGIN?

Well, most scientists believe it started with a...

BANG!

The BIG BANG and our expanding universe

About 14 billion years ago **EVERYTHING**, the entire Universe, was millions of times smaller than a pinhead,  hotter and denser than anything we can imagine.

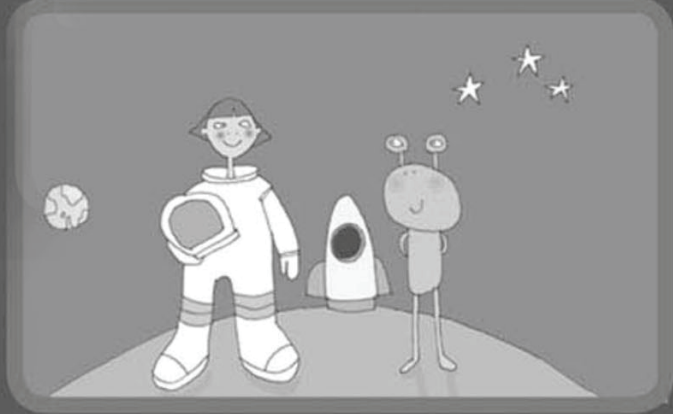
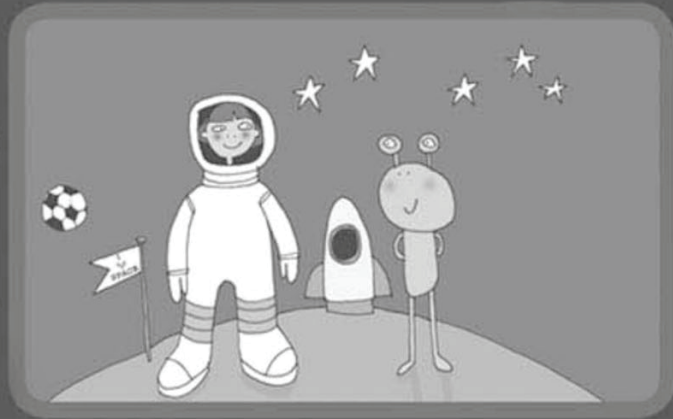
it all began...

... when **EVERYTHING EXPLODED** (which is why people call it 'the Big Bang!') In less time than it takes a bee's wing to beat, the Universe grew from something smaller than a full stop . to something bigger than a galaxy. And it kept on growing really fast.

SPOT THE DIFFERENCE

Can see you spot 6 differences?

COMETS
Comets are giant dirty snowballs with a long tail of melting ice and dust, flying through space. They can take thousands of years to make their lonely way on a huge circuit, or ORBIT, round the solar system. The most famous is Halley's Comet which takes about 76 years to finish its orbit... You might see it in 2061...



ALIENS

The Universe is SO big that it is possible that somewhere there is another planet that has life on it. Perhaps they'd look like us... or completely different!

As the brand new Universe got bigger and bigger it began to cool down, and after a few minutes some of the exploded bits and bobs (tiny stuff, not the bits and bobs that you keep in your kitchen drawer...) started to stick together. By the time the Universe was about a billion years old whole clouds of stuff had started to be drawn together in clumps to make galaxies. In the universe today there are trillions of them. And since they were born, the galaxies have been moving apart, so our universe is getting bigger and bigger...

Inside the galaxies, stars were, and are still, being born - some of them with planets. Inside our galaxy, the Milky Way, the Sun was born, along with its planets, one of which you are standing on right now - Earth.

SPACE DOG!
Laika, the scruffy dog from Moscow, was given proper astronaut training, a space suit and her own rocket. On November 3, 1957 Laika became the first dog in space!



SPACE FLIGHT

Getting into space is VERY VERY hard. You need a rocket, a space suit, air to breathe and a way to get home again! In 1961 the Russian cosmonaut, Yuri Gagarin, climbed into a rocket and went into space. Since then we have sent around 500 men and women into space. The National Aeronautics and Space Administration (or NASA) want to send someone to Mars.

MERCURY

Mercury is named after the Roman messenger of the Gods and is really just a metal ball of iron – a bit like a huge ball bearing.

VENUS

Venus is named after the Roman goddess of love. But it is not a lovely place... The surface of Venus is hotter than an oven, covered with volcanoes and pools of molten rock.

MARS

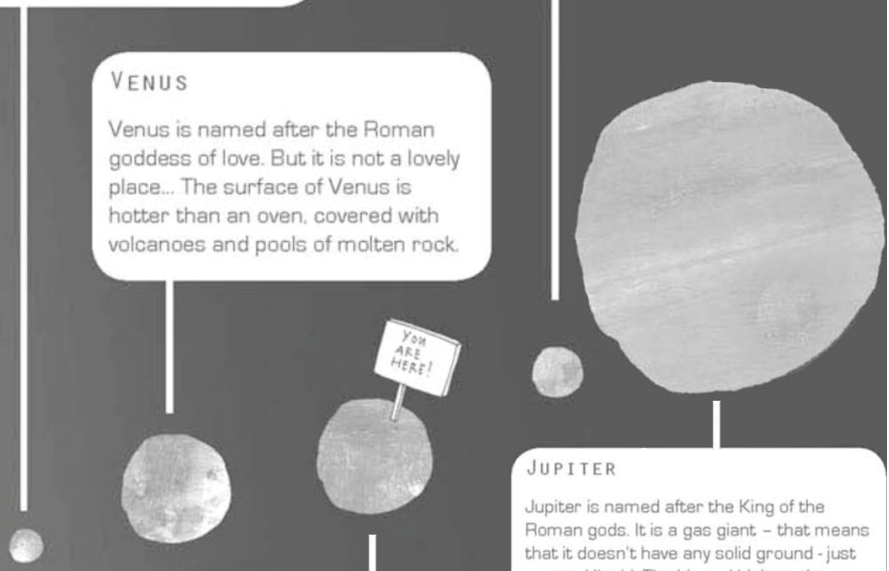
Mars is named after the Roman god of War – and is sometimes called the Red Planet. Scientists believe Mars once had rivers and oceans of water. This means there might be living things on Mars...

JUPITER

Jupiter is named after the King of the Roman gods. It is a gas giant – that means that it doesn't have any solid ground – just gas and liquid. The big red blob on the surface of Jupiter is a huge storm that has been raging for more than 300 years. This storm is so big you could fit the Earth inside it... Jupiter is REALLY big.

EARTH

Earth is a very special place. It has water, it's not too hot, not too cold. It is just right. In fact some scientists say that Earth is in "The Goldilocks Zone" where everything is just right – like Little Bear's porridge. We don't yet know of any other planets that have all the ingredients to make life... none are "Just Right".





URANUS

Uranus is named after the Lord of the Skies. Scientists think that beneath the layer of clouds covering its surface is a huge ocean. Beneath the ocean is a rocky core which is being squashed by all the water. This rocky core might be filled with **GIANT DIAMONDS...** crikey.

NEPTUNE

Neptune is named after the Roman god of the oceans. We don't know much about this planet as it is really far away. We do know that it has rings of rock and dust – a bit like Saturn's but not as clear.



SATURN

Saturn is named after the Roman god of Farming. This beautiful planet has some fantastic rings of dust and rock **ORBITING** around it. Like Jupiter, Saturn is a gas giant with no solid ground. We could never live here because there is no oxygen, in fact we would be poisoned by the gases.

What about Pluto?

Until 2006 Pluto was thought to be a planet – but now we call it a dwarf planet, because it is so small. There are well over 40 of these dwarf planets in the Solar System. It is **SO** far away we know very little about it...

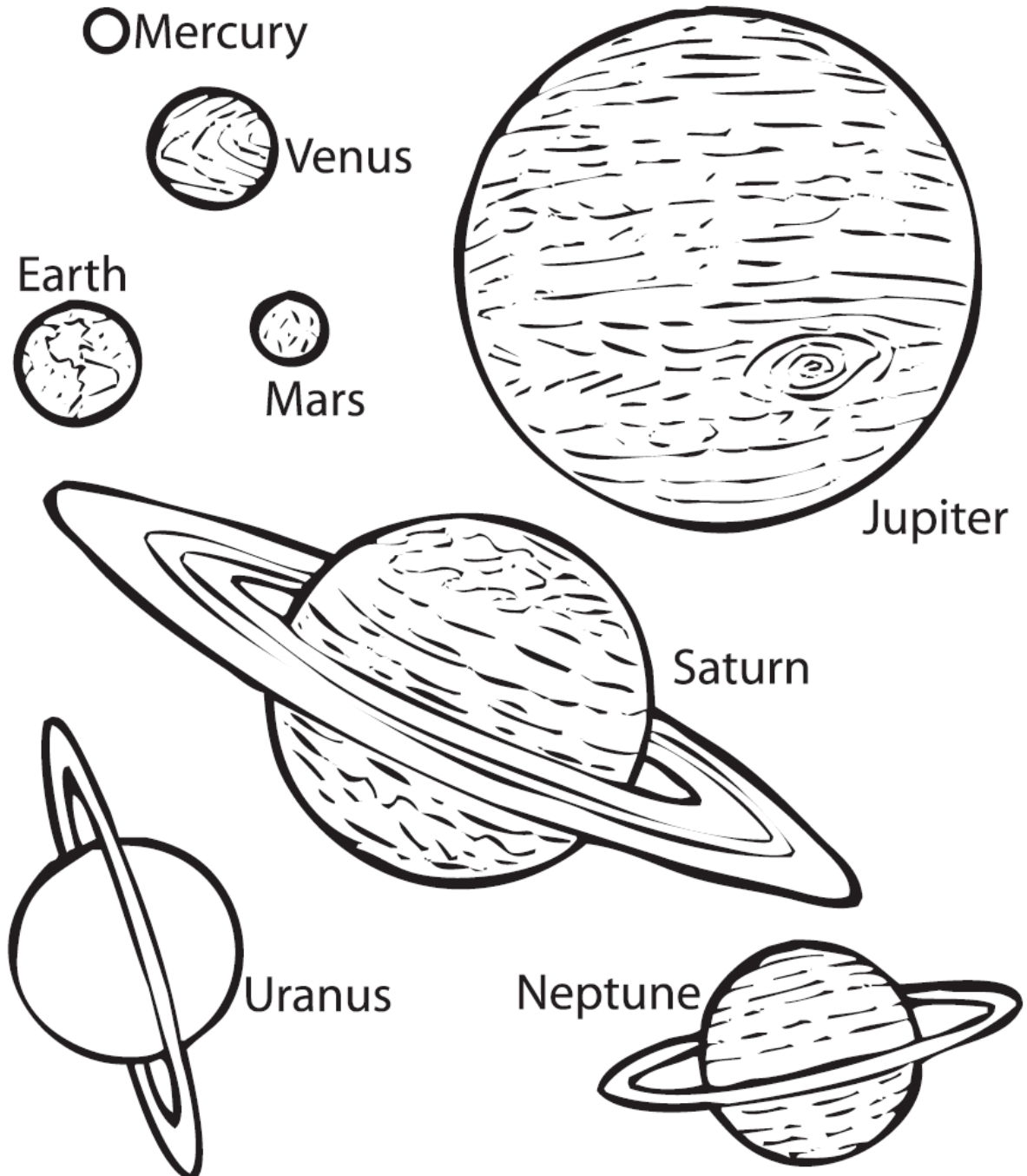
LIVING IN SPACE?

Floating above the Earth is the International Space Station, a space laboratory where astronauts from all corners of the world live and work together to find out more about space, the universe and everything in it.



Learning Activi-

Copy and have students color in the planets in the solar system!



Search For Words

Find and circle the words. The run right to left, left to right, bottom to top, top to bottom, and diagonally top to bottom or bottom to top.

heavenly
planets

meteors
comets

orbit
telescope

solar
revolve

stars
Earth

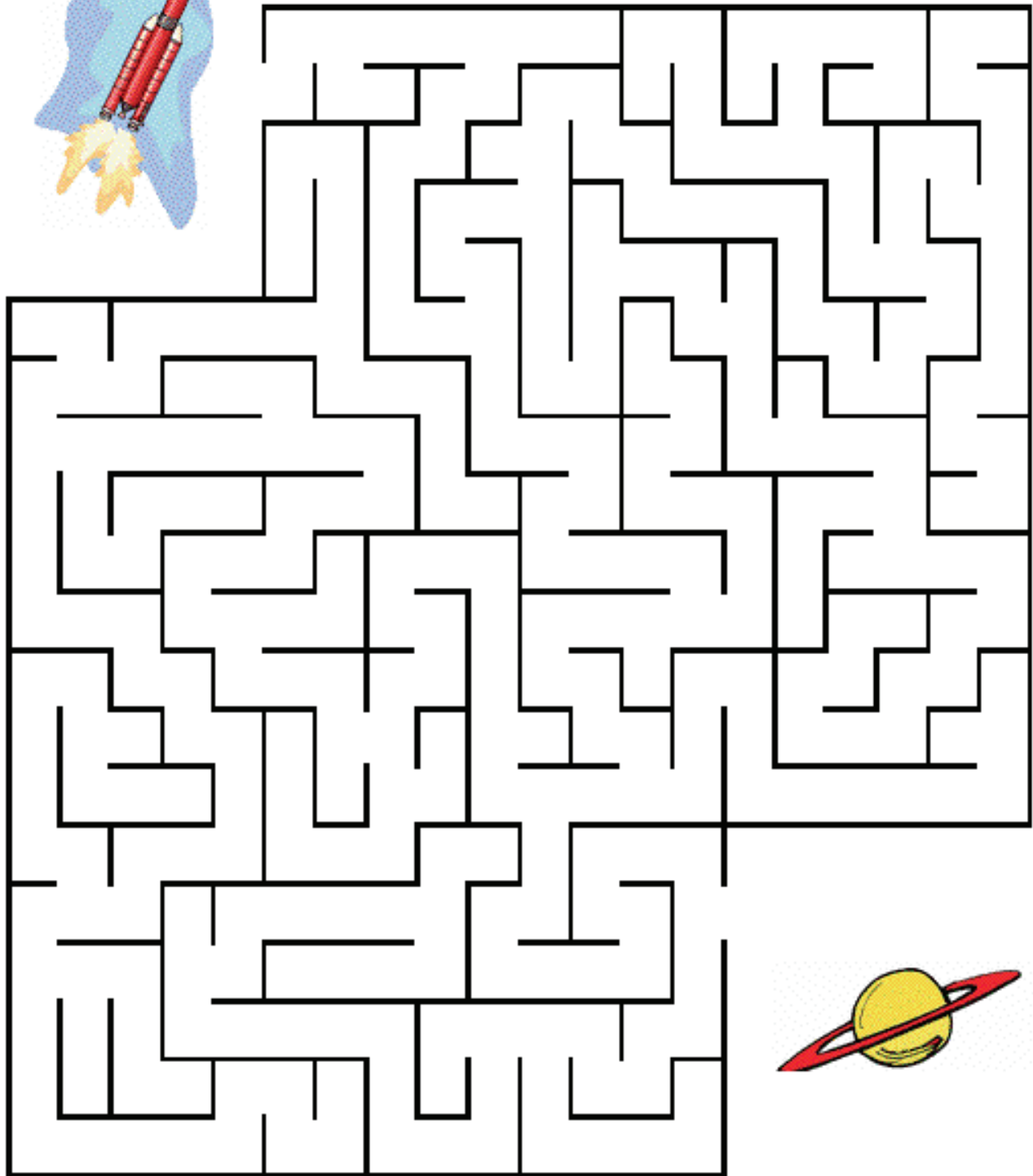
systems
sun



s m r e x l y u t s n e f d t
i t a h r m e t e o r s w a h
t l a r g e l y c l e u o r e
e e a a r t h t t c a v n l u a
l v a c s x m n n r s r l n v
e t m u s g c o l v g t v r e
s y s t e m s v i o l e o c n
c r i w d r i g c h f l r l l
o s t d f e i n o v b w b a y
p r i i c e l t m e r s i s e
e s r e v o l v e t t w t n d
s r e c f o b o t o e s n g d
z a p l a n e t s t h s s i i

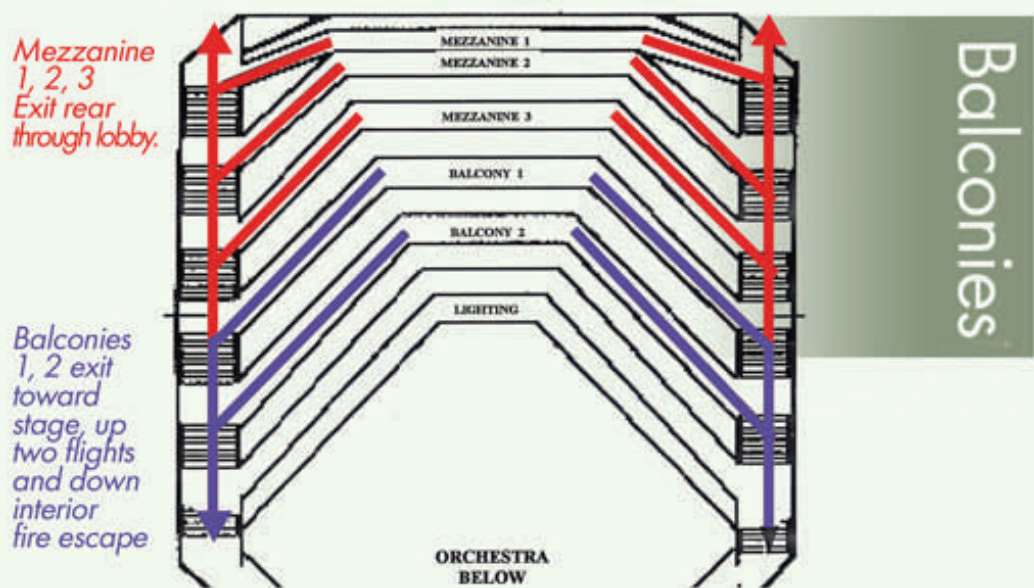
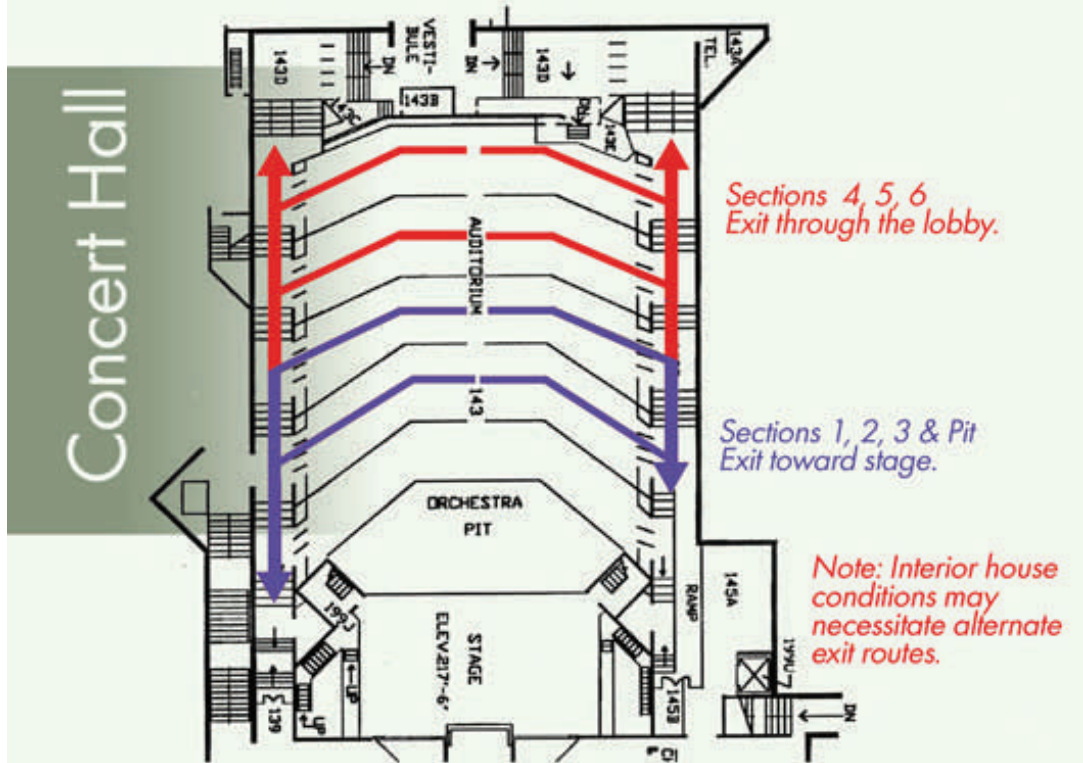
Amazing Fun!

Help the rocket get to saturn.



Evacuation Procedures

In the event of an emergency requiring evacuation of the building, procedures are in place to ensure that the audience can exit safely.



PARKING AND DIRECTIONS FOR THE FINE ARTS CENTER'S **CONCERT HALL and RAND THEATER**

School Bus Parking: Students should be dropped-off at Haigis Mall off of Massachusetts Avenue.

University Security will direct buses to an appropriate parking lot during the performance (typically by the football stadium). PLEASE BE SURE YOUR BUS DRIVER KNOWS THAT ALL PERFORMANCES LAST APPROXIMATELY 1 HOUR AND THEY SHOULD RETURN A FEW MINUTES BEFORE THE ANTICIPATED END TIME. If drivers are not with the buses, they may miss the radio call from security asking them to return for pick-up, resulting in unnecessary delays returning to your school.

Individual cars: If necessary, individuals may drop-off students with a chaperone at Haigis Mall (you will be directed by security to the mid-point turn of Haigis Mall – see map) prior to parking. **We recommend parking in the Campus Center Parking Garage to avoid searching for a metered space.** It is a five-minute walk to the Concert Hall. All other available parking during weekdays is at meters. Available lots and pricing (current as of 1/1/07) are listed below:

Parking in the Garage is available to our patrons at a discounted rate of \$1. To receive this rate you MUST give the Garage attendant a parking pass. To receive your pass, please call our office to let us know that you will be arriving by car. Parking passes are sent with the invoices. Please call (413) 545-2116 if you didn't receive one.

Parking meters are enforced Monday – Friday, 7AM – 5PM. Meter rates are \$1.00 per hour.

Parking Garage – near Campus Center, across from the Mullins Center off Commonwealth Avenue

Lot 34 – Behind Visitors Center with 3, 5 & 10-hour meters available

Haigis Mall – 2 hour maximum on meters

Lot 62 - Adjacent to Fernald Hall with 3 hour maximum on meters, limited spaces available.

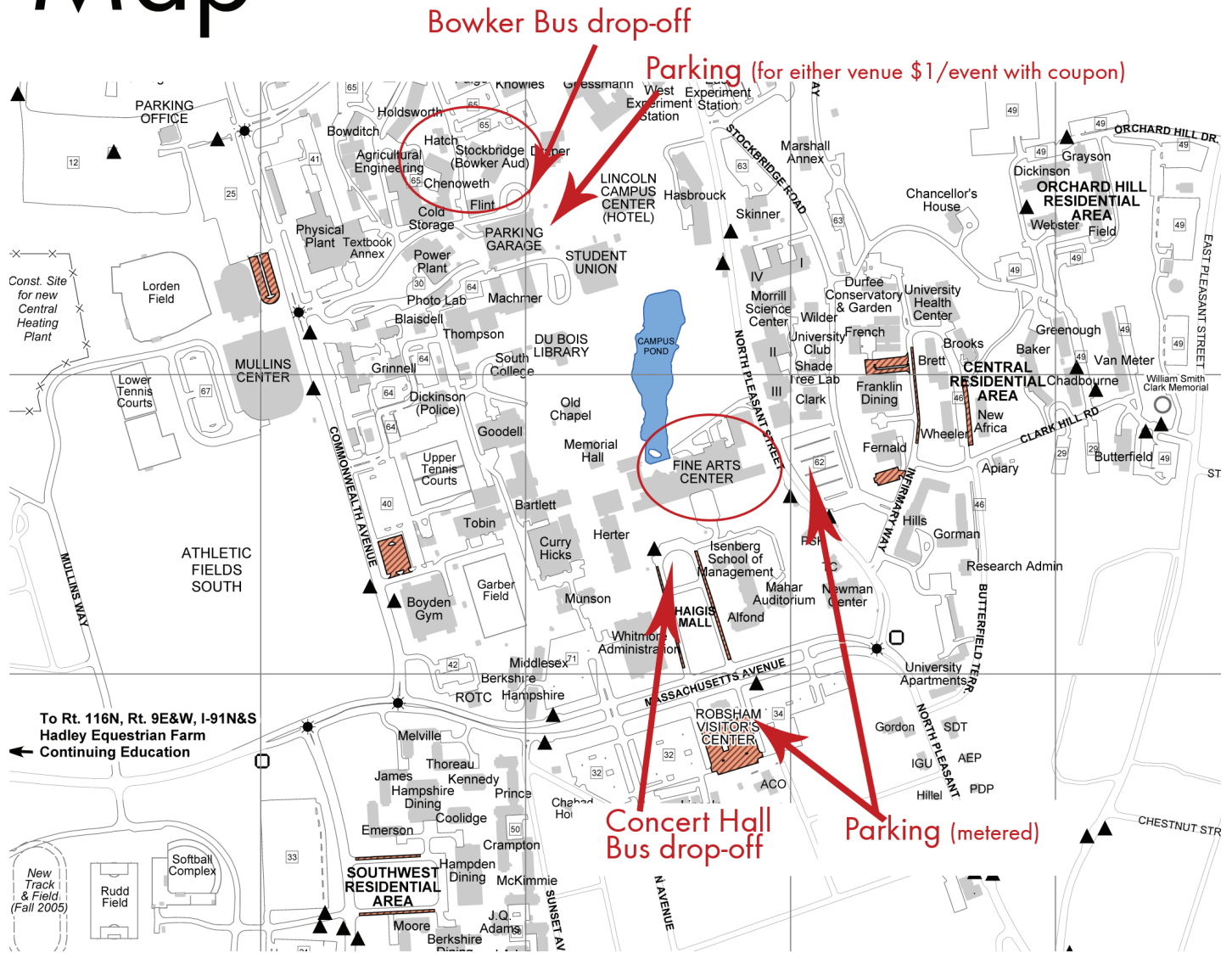
From the North: (Vermont, Greenfield) I-91 south to Route 116. Follow signs on 116 "To the University of Massachusetts." Exit ramp leads to Massachusetts Avenue. Turn left (east) on to Massachusetts Avenue toward the campus. Continue through one light and watch for Lot 34 by the Visitors Center on your right and the entrance to Haigis Mall on your left.

From the South: (Springfield, Holyoke) I-91 north to Route 9. Turn right (east) on Route 9 over the Coolidge Bridge and through Hadley. Turn left (north) on Route 116 (across from Staples) heading toward campus. Turn right at first exit at "University of Massachusetts," then bear right onto Massachusetts Avenue toward campus. Continue through one light and watch for Lot 34 by the Visitors Center on your right and the entrance to Haigis Mall on your left.

From the West: (Northampton, Pittsfield) Route 9 east through Northampton and over Coolidge Bridge. Follow remaining directions under "From the South".

From the East: (Belchertown, Ludlow) North on Routes 21, 181 or 202 to Route 9 into Amherst. Right on to North Pleasant Street (main downtown intersection), north through center of town. Turn left at Triangle Street (Bertucci's Restaurant on your right), rejoining North Pleasant Street. To reach Lot 34 and Haigis Mall continue on main road, which becomes Massachusetts Avenue. Haigis Mall will be on your right, Lot 34 on your left.

Map



For Concert Hall, Rand Theater and Bowker Auditorium – Patrons traveling by car are encouraged to park in the parking garage. Discounted parking is available in the garage for \$1. A parking permit is required for discounted parking in the garage. Please call the Arts & Educational Programs Office if you require permits at (413) 545-2116. All other parking on campus is at available meters at the rate of \$1 per hour. Parking is enforced Monday – Friday, 7AM – 5 PM.

Buses will drop-off students as indicated on map. Buses will be given parking instructions by Campus Security.