



The Challenger Learning Center for Tech Valley is partnering with the Schenectady Museum & Suits-Bueche Planetarium, BOCES and the Saratoga School System to host a series of NASA Downlink Programs.

**BACKGROUND:**

In May 2010, the Challenger Learning Center (CLC) will be submitting an application to NASA to host an International Space Station (ISS) Downlink curriculum which will include four pre-downlink and two post downlink activities. The downlink will occur sometime between September 2010 and May 2011, and will be available to 800 + students on-site and 80,000 + students off-site within our 19 counties in upstate New York, southern Vermont and western Massachusetts. Plans include additional public viewing with Time Warner Cable Vision.

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**PROGRAM 1 – ISS DAY at the MUSEUM**

Dates: Saturday September 25 or Saturday October 2

Time: 11am – 4pm

Museum will provide 100 passes for free child’s admission that can be distributed to participating schools.

Activities: Drop-In Activity stations (2 – 3 stations) set-up on gallery floor may include:

- Land a Spaceship on the planet Ooblek
- Build a Hover Craft
- Build a model of the ISS
- Depending on scientific mission, do activity on that subject
- Class in the Studio (These would be two 45 minute classes)

Classes come from the *On The Moon* educator guide created by NASA/Design Squad

*Touchdown* - A shock-absorbing system that will protect two marshmallow "astronauts."

*On Target* - A paper cup modified so that it can carry a marble down a zip line and drop a marble onto a target.

Planetarium Shows

- Offer five 20 minute shows throughout the day
- Shows will focus on the ISS and the upcoming expeditions

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**PROGRAM 2 – MEET THE PEOPLE OF NASA**

Dates: Weekday Evening

Time: 6:00pm – 8:00pm

Museum will provide 100 passes for free child’s admission that can be distributed to participating schools.

Activities: John Charles (NASA – Mars mission, Project Director to present a lecture at the museum.

Refreshments



**PROGRAM 3 – MEET THE PEOPLE OF NASA**

Dates: Weekend Afternoon  
Time: TBD

Museum will provide 100 passes for free child’s admission that can be distributed to participating schools.

Activities: Skype conversation with Chris Cassidy (NASA Astronaut)

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**PROGRAM 4 – STAR PARTY**

Dates: One night during week of November 6 – November 13  
(Moon waxing to 1<sup>st</sup> quarter)  
Night of December 21 (Total Lunar Eclipse)

Time: Evening, 3-4 hours

Activities: Mini-planetarium shows - Telescopes for night viewing.  
Central Park Middle School students presentation  
Star Wars characters will perform  
Refreshments

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**NASA Downlink Program Budget**

Programs 1 – 4 at Museum	Materials – Promotion – Refreshments – Staff	\$7,420
Student Transportation	10 Buses (mileage & wages)	1,800
CLC of Tech Valley	Marketing – VIP & Political – Administrative	1,900
BOCES – Time Warner	IT staff – School Marketing	<u>2,600</u>
<b>Total Projected Budget</b>		<b>\$13,720</b>

*If you are interested in supporting this exciting educational program please visit our web site to make a donation. [www.challengerlearningcenter.org](http://www.challengerlearningcenter.org)*



## MATH AND SCIENCE STUDENT ENROLLMENT 5TH - 8TH GRADES WITHIN OUR CATCHMENT AREA \*

<u>County</u>	<u>Public</u>	<u>Private</u>	<u>Total</u>	<u>*Class Rooms</u>
<b><u>Primary Market</u></b>				
Albany	11,966	1,879	13,845	494
Montgomery	2,335	125	2,459	87
Rensselaer	6,692	815	7,507	268
Saratoga	10,690	446	11,136	397
Schenectady	<u>6,880</u>	<u>493</u>	<u>7,373</u>	<u>263</u>
<b>Total - Primary Market</b>	<b>38,563</b>	<b>3,758</b>	<b>42,320</b>	<b>1,509</b>
Columbia	2,679	190	2,869	102
Delaware	2,019	180	2,199	78
Fulton	2,757	98	2,855	101
Greene	2,264	349	2,613	93
Schoharie	1,580	23	1,603	57
Washington	<u>3,031</u>	<u>157</u>	<u>3,187</u>	<u>113</u>
<b><u>Market with-in 75 miles</u></b>	<b>14,330</b>	<b>997</b>	<b>15,326</b>	<b>544</b>
Clinton	3,816	262	4,079	145
Essex	1,348	203	1,551	55
Franklin	2,490	110	2,599	92
Hamilton	167	0	167	6
Herkimer	3,199	71	3,270	116
Otsego	2,678	89	2,767	98
St. Lawrence	4,864	213	5,077	181
Warren	<u>3,248</u>	<u>87</u>	<u>3,335</u>	<u>119</u>
<b><u>Market with-in 150 miles</u></b>	<b>21,810</b>	<b>1,035</b>	<b>22,845</b>	<b>812</b>
<b>Total NYS Market</b>	<b>74,703</b>	<b>5,790</b>	<b>80,481</b>	<b>2,865</b>
<b>Vermont &amp; Massachusetts</b>			<b><u>30,000</u></b>	<b><u>1,071</u></b>
<b>Total Potential Market</b>			<b>110,481</b>	<b>3,963</b>

\* Source: New York State Education Department, as reported in the 2007 New York State Statistical Yearbook.