

## **CPALMS Perspectives @ STEM Expo!**

The CPALMS *Perspectives* video program is creating brief, standards-aligned resources highlighting experiences and thoughts regarding math and science from experts, teachers, professionals, and skilled enthusiasts. These videos are useful for strengthening content knowledge, learning new approaches to teaching, and for highlighting the appearance of science and mathematics concepts in practical, real-world situations. Read about some examples below and click the images to go to the videos! Then get ready to make your own STEM video! See details below.



Math Professional: Wes Raley Master Candy Maker

Mr. Raley explains how exponential growth is critical for the production of white candy from raw sugar, which is actually amber in its liquid state.



Science Expert: Dr. Greg Boebinger
Director, National High Magnetic Field Laboratory

• Dr. Boebinger explains how interacting electric and magnetic field create the electromagnetic spectrum



Science Teacher: Melissa Griffin Assistant State Climatologist

 Ms. Griffin presents an idea for teaching about how air masses with different temperatures interact in 3D space to create weather events

#### STEM Expo 2015

A STEM Video competition is planned for STEM Expo 2015 and selected videos will be featured on CPALMS! One entry per grade band per school will be allowed submission for review and the Top 5 per grade band (E,M,H) will be highlighted at the EXPO! Each video should capture an interview and supporting footage and be between 3 and 5 minutes long. Each grade band will have a focus area:

ES (K-5): An interview with a STEM Expert such as a scientist, engineer, or mathematician MS (6-8): A panel of students explaining a STEM concept *or* a classroom teaching idea HS (9-12): A STEM student community outreach project *or* a real-world STEM example

Awards for the top 3 videos in each grade band will be based on content accuracy, alignment to Florida's current mathematics and science educational standards, educational value, and artistic merit. Winners will receive a certificate and gift card award. Please see <a href="CPALMS.ORG">CPALMS.ORG</a> for information regarding Florida's education standards. Content related to Florida's science and math standards should be the focus of these videos!

More information: CPALMS.ORG | STEMVIDEOS.ORG | STEM Expo

# **CPALMS Perspectives Program Details**

### **Judging**

A panel of judges composed of FCR-STEM staff content and teaching experts will determine the winners. See below for a scoring rubric. Prizes will be awarded per grade band according to the table below.

Judged Category	Points
Standards alignment	30
Content accuracy	30
Creativity and artistic merit	25
Follows technical guidelines	15
Total	100

Place	Award
1 <sup>st</sup> Place	\$200
2 <sup>nd</sup> Place	\$100
3 <sup>rd</sup> Place	\$50

#### **Technical Guidelines**

Each video must meet the following technical guidelines\*:

Criterion	Specification	
Aspect ratio	16:9	
Dimensions	Submit one 718 x 404 video for judging. Winners should be prepared to submit one 1920 x 1080 (F	
	HD) after the competition. Please record in full HD.	
Video Compression	H.264	
File type	.mp4	
File size	< 80 MB	
File name	GradeBand_StandardCode_SchoolName_City.mp4	
	For example: HS_SC912L1810_CentralHS_Miamiville.mp4	
Time	5:00 minutes maximum total run time	
On-screen information	Interviewees should be clearly identified with name, title, and affiliation in superimposed text. Sans	
	serif fonts only.	
Copyright	No copyright-protected work can be used in the video. Original material only unless Fair Use rules	
	apply and verification is provided.	
Permissions	Each identifiable person in your video must complete a <b>CPALMS video release form</b> . Please download	
	the form, have it signed by your video participants, and upload it to the submission form when you	
	submit your video. Minors must have their form signed by a parent or guardian. This form is also	
	available through the video submission site.	
Entry limits	Submissions are limited to one video per grade band per school (Grade bands: K-5, 6-8, 9-12)	
Other notes	Interviewees should be clearly audible. Cuts and graphics should support, not distract from the	
	content. Please retain all project files in case additional materials are required from the winners.	
	Entries that do not meet these guidelines may not be considered for judging.	

<sup>\*</sup>Most tablets and smartphones are compatible with these guidelines. You may use an iPhone or similar device if you have one!

### **Suggested Questions**

The following questions are not required but might help you during an interview with an expert, teacher, enthusiast or professional! Simple questions sometimes lead to the best answers!

For experts	For teaching ideas	For real-world examples
What does mean to you?	Why is this teaching idea great?	How did you get into this area?
Why should we know?	How do students react to the idea?	How do you use math/science?
How did you get interested in?	Why do students enjoy the idea?	What is your favorite part of?
Walk us through the steps for?	What supplies are needed?	What should students study to do?
Why do you like your field of study?	What timeline is needed?	What led you into this career?

#### **Submission Instructions**

Video submissions are due by 5:00PM, December 19, 2014

To submit your video, please complete the <u>Submission Form</u>: http://form.jotformpro.com/form/42473675548971

You will need to complete some basic contact information and upload:

- a) your CPALMS Video Release form(s)\* for all participants appearing in the video
- b) your video file
- \*Please note that if you are submitting release forms for multiple video participants, you must zip the files into one file prior to upload.

#### **Contact**

Please direct questions to Dr. Adam Santone: <a href="mailto:asantone@lsi.fsu.edu">asantone@lsi.fsu.edu</a>