

Student Program Curriculum

Basic Program Information

Host Institution:	Prince George's Arts and Humanities Council
Program Title:	2016 Paint Branch Chinese STEAM & Culture Academy
Curriculum Title:	2016 Paint Branch Chinese STEAM Grade 5-6
Language(s):	Chinese;
Grade(s) of Learners:	K-2; G3-5;
Language Background:	Non-heritage;
Program Setting:	Non-residential
Program Type:	Blended
Duration:	14 Days

Contact Hours: 94 Hours

STAGE 1: What will learners be able to do with what they know by the end of the program?

Target Proficiency/Target Performance

Target Proficiency Level (by end of program):

Novice Range

Target Performance Level(s) (during and by end of program):

Novice low, Novice Mid

Program Overview and Theme

Students will explore the world of science by making their own ice cream to beat the summer heat. They will be introduced the concept of the three states of matter and how each changes from one to another with hands-on experiments. They will explore what ingredients they need in small groups of 2-3 people. Chinese language skill acquisition will be integrated into fun hands-on STEAM (Science, Technology,

Engineering, Arts, and Mathematics) activities such as “What’s the matter with ice cream?”, “Does eating ice cream cool you down?”, “How much is two scoops of ice cream?” and etc., as well as those introducing China’s rich cultural heritage and history: including but not limited to Chinese art, crafts, games, martial arts, and calligraphy. The program will allow students to improve their oral communication skills in all three modes of communication (interpretive, interpersonal, and presentational). Students will be able to use the target language to ask and answer simple questions about their identity (name, age, grade, background) and describe their preferences on certain subjects (likes, dislikes, etc.). Students will also be able to describe the content knowledge they will learn (e.g. the three states of matter and its properties, what causes matter to change its state, etc.). These language skills will be developed and practiced by way of a variety of instructional methods and activities. Total physical response (TPR) games and Teaching Proficiency through Reading and Storytelling (TPRS) will be incorporated; students will have ample opportunities for role play. We will create a supportive atmosphere where students are willing to take risks, and where the versatility of language is valued and highlighted. Students will be encouraged to activate and apply their prior knowledge with each new topic area that is covered, with the result that they continually scaffold their learning on a personal level. By the end of the program, students will be able to exchange information in Chinese based on their age and level of maturity, such as greeting each other, introducing their family, talking about their favorite fruits, food, and flavors of the ice cream. Students in different age groups will experience differentiated activities to be able to achieve their learning goals. All in all, students will be encouraged and expected to take their passion for learning Chinese with them as they step out into the community. Students will be encouraged to share what they have learned each day with their parents, siblings, friends and neighbors. Students will be asked to think about how they can use Chinese in

both their local community and on a broader level (nationally or internationally). Students will be exposed to ideas of global citizenship and will learn to acknowledge and identify the benefits of multilingualism and cultural awareness.

Learning Goals	
NCSSFL-ACTFL Global Can-Do Benchmarks Be sure to label the mode and proficiency level of each statement.	Program Can-Do Statements or NCSSFL-ACTFL Can-Do Statements
Interpersonal Communication	
(Novice Mid: I can communicate on very familiar topics using a variety of words and phrases that I have practiced and memorized.)	1. I can greet people I meet in class using single words.
	2. I can tell someone my name and ask someone his/her name.
	3. I can exchange information about my family when interacting with others.

	<p>4. I can communicate my preferences with others such as likes/dislikes, ice cream flavors.</p> <p>5. I can identify the difference between a physical change and a chemical change.</p> <p>6. I can use familiar terms to buy/sell ice cream with visual aids.</p> <p>7. I can exchange information about price, quantities, flavors and shape of ice cream.</p>
Interpretive Listening	
<p>(Novice Mid: I can recognize some familiar words and phrases when I hear them spoken.)</p>	<p>8. I can recognize and sometimes understand basic information conveyed by words and phrases that I have memorized such as greetings, inquiry about basic personal information, and classroom phrases.</p>

	<p>9. I can understand simple information when presented with pictures, PPT, and other visual aids about numbers, different ingredients, flavors of ice cream, and action words related to making ice cream in a bag.</p>
	<p>10. I can recognize and understand familiar words and phrases such as family members, numbers, monetary unit, colors, flavors, shapes, States of Matter, a physical/chemical change and ingredients for making ice cream.</p>
<p>Interpretive Reading</p>	
<p>(Novice Mid: I can recognize some letters or characters. I can understand some learned or memorized words and phrases when I read.)</p>	<p>11. I can recognize numbers from 1 to 100, days of the week, months, year, family members, and numbers.</p>
	<p>12. I can recognize monetary unit, colors, flavors with help of visual aids.</p>

	<p>13. I can match pictures with expressions such as melt, evaporate, condense, freeze ,boil, and 3 states of the matter.</p>
<p>Presentational Speaking</p>	
<p>(Novice Mid: I can present information about myself and some other very familiar topics using a variety of words, phrases, and memorized expressions.)</p>	<p>14. I can count, and name common colors, flavors, shapes, metric units which measures the ingredients.</p>
	<p>15. I can state the steps of how to make my own ice cream in a bag.</p>
<p>Presentational Writing</p>	

STAGE 2: How will learners demonstrate what they can do with what they know by the end of the program?

Summative Performance Assessment		
INTERPRETIVE TASK	INTERPERSONAL TASK	PRESENTATIONAL TASK
Learners understand, interpret, and analyze what is heard, read, or viewed on a variety of topics.	Learners interact and negotiate meaning in spoken, or written conversations to share information, reactions, feelings, and opinions.	Learners present information, concepts, and ideas to inform, explain, persuade, and narrate on a variety of topics using appropriate media and adapting to various audiences of listeners, readers, or viewers.
Students will be given separate steps for making ice cream written in characters on separate strips of paper. They will	Students will be paired up with one classmate and together will exchange information about their favorite ice cream	Students will make a PowerPoint/poster presenting in pinyin and characters the steps about how to make their own ice

then put the strips of paper in the proper order that reflects the correct ice cream making procedure.

and together decide what kind and how much ice cream each would like to buy. They will then order and buy this from their teacher who will be acting as the ice cream vendor.

cream in a bag. Students will present these steps in a spoken presentation to their classmates using their PowerPoint/poster as a guide.

STAGE 3: What will prepare learners to demonstrate what they can do with what they know?

Learning Experiences			
No.	Program Can-Do Statements NCSSFL- ACTFL Can-Do Statements Learners can...These Can-Dos are from Stage 1 Learning Targets.	Language, Culture, Content Learners need to use...List the language chunks, vocabulary, grammatical structures, cultural knowledge, and content information that learners need to accomplish the stated Can-Dos listed in column 1.	Major Learning Experiences & Evidence Learners will experience & demonstrate...Describe the key learning tasks/activities/formative assessments that allow learners to demonstrate that they can meet the stated Can-Do.
Interpersonal Communication			

1	I can greet people I meet in class using single words.	你好、早上好、下午好、再见、请、谢谢、没关系、对不起	Students practice greeting in and outside of the classrooms. Students reinforce their memory through practice greeting every day. Teacher greets students as they come to the classroom during different times of the day and use “thank you, sorry, you are welcome” whenever needed.
2	I can tell someone my name and ask someone his/her name.	你好！我叫_____, 你叫什么名字?	As an opening routine, students will role play, hot potato and other fun game to practice the simple greeting in Chinese. Use the smart board to show the sentence and introduce the Chinese characters’ meanings separately like “you, I , what, name.

3	I can exchange information about my family when interacting with others.	你好！我叫_____, 我10岁。我有_____(爸爸、妈妈...)。你呢?	Students will create a family portrait and interview at least three classmates about their families to complete an information sheet and introduce the family of one classmate.
4	I can communicate my preferences with others such as likes/dislikes, ice cream flavors.	这是什么口味的？喜欢不喜欢？	In pairs, students share their preference for colors, flavors of ice cream with their partner.
5	I can identify the difference between a physical change and a chemical change.	气体、液体、固体 液体 蒸发 变 气体 液体 凝结 变 固体	In pairs, students exchange pictures with captions related to the matter.
6	I can use familiar terms to buy/sell ice cream with visual aids.	买， 卖， 买什么？ 你要买什么？ 我要买冰淇淋。 要几个/球冰淇淋？	Students participate in a skit where some students are selling ice cream while others are walking around and buying

			ice cream they want. Students will use fake money to buy and sell ice creams. Students will record the value of their ice creams.
7	I can exchange information about price, quantities, flavors and shape of ice cream.	这是什么口味的？喜欢不喜欢？有几个/球冰淇淋？这里有几个冰淇淋？一个/球冰淇淋几块钱？	Students pair up and do a role play. one student is the ice cream vendor while the other is the customer asking for the type of ice cream he/she tries to purchase.
Interpretive Listening			
8	I can recognize and sometimes understand basic information conveyed by words and phrases that I have memorized such as greetings, inquiry about	请坐下、排队、请安静、洗手间、吃饭、眼睛看、耳朵听。站起来、不要说话、注意听、看老师	Students do TPR or use body gesture to show their comprehension when presented with words and phrases.

	basic personal information, and classroom phrases.		
9	I can understand simple information when presented with pictures, PPT, and other visual aids about numbers, different ingredients, flavors of ice cream, and action words related to making ice cream in a bag.	口味：草莓，巧克力，香草、蓝莓、芒果、芋头 杯子（里）放牛奶，加糖，加香草香精，放到袋子里，摇，放（在）冰块，冰块加盐。	Students show their understanding by following teacher's instructions step by step in making their own ice cream. The steps are as follows: Put milk into the cup. Add sugar Add vanilla extract Put the mixture into the bag Shake the bag. Put the bag into a bag of ice. Add salt into the bag of ice.
10	I can recognize and understand familiar words and phrases such as family members, numbers, monetary unit, colors, flavors, shapes, States of Matter, a	爸爸、妈妈、1-100，块（元），红、橙、黄、绿、咖啡、粉红、三角形、圆形、正方形、固体、液体、气体、融化、蒸发、凝结	Students do TPR or use body gesture to show their comprehension after listening to their teacher's instruction. They show their understanding by pointing at the

	physical/chemical change and ingredients for making ice cream.		right picture on the board after hearing the expressions.
Interpretive Reading			
11	I can recognize numbers from 1 to 100, days of the week, months, year, family members, and numbers.	一、二、三、四、五、六、七、八、九、十、十一、十二、十三、十四、十五、十六、十七、十八、十九、二十.....一百 星期一、星期二、星期三、星期四、星期五、星期六、星期日 一月到十二月 今天是二零一六年七月二十日星期三	Students use flashcards, smartboard interactive games and Chinese calendar to practice dates and numbers
12	I can recognize monetary unit, colors, flavors with help of visual aids.	白色、红色、黄色、绿色、蓝色 香草、巧克力、草莓、牛奶、一块、五块、十块、二十块、一百块、香草、草莓、巧克力	Students identify real-life objects in different colors and through bingo game they show their reading skills to complete the game.

13	I can match pictures with expressions such as melt, evaporate, condense, freeze ,boil, and 3 states of the matter.	固体、气体、液体 液体蒸发变气体 液体凝结变固体	Students use TPR or body gesture to show their comprehension when presented with words and phrases. Game “fishing/ matching” to choose the right information with picture.
Presentational Speaking			
14	I can count, and name common colors, flavors, shapes, metric units which measures the ingredients.	5+12=17 40-14+26 我喜欢吃白色香草冰淇淋 一球冰淇淋要三块	With guidance from the teacher, groups of students make a poster to present their work/math calculation in front of the class to show their comprehension.
15	I can state the steps of how to make my own ice cream in a bag.	杯子（里）放牛奶，加糖，加香草香精，放到袋子里，摇，放（在）冰块，冰块加盐。	Each group of students will make a video to show their creativity of how to make their own unique/selected flavor of ice

			cream and then share their video with the whole class.
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Presentational Writing

Materials & Other Resources
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ACTFL proficiency guidelines http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012_FINAL.pdf ACTFL Performance Descriptors for Language Learners http://www.actfl.org/sites/default/files/pdfs/ACTFLPerformance_Descriptors.pdf NCSSFL/ACTFL Can Do Statement http://www.actfl.org/sites/default/files/pdfs/Can-Do_Statements_2015.pdf NCSSFL-ACTFL Global Can Do Benchmarks http://www.actfl.org/global_statements World Languages Elementary STEM Module from Maryland State Department of Education Materials and Resources

- o A cooler to store the ice.
- o measuring cups
- o Chart paper to record student observations
- o Snowman puppet made of a water bottle filled with frozen water.
- o States of Matter song <http://www.youtube.com/watch?v=btGu9FWSPtc>
- o Permission Slip Note: if students have not returned permission slips, they may not taste the ice cream.
- o How to make a Paper Pinwheels or Windmills http://frugalliving.about.com/od/frugalfun/ss/Pinwheel_3.htm Lesson
- o Materials for making ice cream
- o Small plastic bowls enough for students
- o Milk
- o 1 metal can, about 16 ounces
- o Enough ice cubes to fill the can
- o Enough water to cover the ice cubes
- o Instant-read thermometer
- o 1 tablespoon sugar
- o 1/2 cup milk or half & half
- o 1/4 teaspoon

vanilla o 6 tablespoons rock salt o 1 quart-size plastic food storage bag (e.g., Ziploc) o 1 gallon-size plastic freezer bag of ice cubes o Marshmallows o Toothpicks

Daily Schedule

Schedule	Activity
8:00 am - 9:00 am	Morning Briefing (Teachers)
9:00 am - 9:20 am	Opening Engaging Activity - exercise, movement, song,...etc.
9:20 am - 10:10 am	Class I - Language Class
10:10 am - 10:40 am	Break - Snack
10:40 am - 11:30 am	Class II - STEM Class
11:30 am - 12:30 pm	Lunch/Recess
2:30 pm - 01:20 pm	Rotational cultural activity, depending on grade-level group
01:30 pm - 02:20 pm	Rotational cultural activity, depending on grade-level group
02:30 pm - 03:20 pm	Rotational cultural activity, depending on grade-level group

03:30 pm - 04:00 pm	Afternoon Debriefing/Reflection (teachers & Staff)
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