



# Weekly Planner: AP CSP week of 3.2.20



## AP CSP

Jan 27, 2020 Flip Code: [cccaapcsp](https://cccaapcsp.com)

### BIG IDEA for the week:

3- ALGORITHMS AND PROGRAMMING

Day	
<b>Mon</b> <b>3.2</b>	<p><b>(30 min)</b> 1) Finalize your Explore Task and put in there but <b>DO NOT DO NOT DO NOT</b> make the final submission!!</p> <p><b>(1 hour + SMART lunch time)</b> 2) Complete unit 3 and I mean <b>ALL</b> of it. and...</p> <p>3) Open up code studio and try out the example codes I gave you at the bottom of this agenda. Explain what each does as your homework.</p>
<b>Tues</b> <b>3.3</b>	<p><a href="https://flipgrid.com/0ad04b2b">https://flipgrid.com/0ad04b2b</a></p> <p>Google TRENDS</p> <p>UNIT 5 Lesson 1</p> <p>*HW= finish lesson 1 and then work on badge</p>
<b>Wed</b> <b>3.4</b>	<p>Consider the code labeled "C.M." below the warm up... what does it do? How many screens does it need? How would you find this script on code.org?</p>

	<p><b>UNIT 5 Lessons 2 and 3</b></p> <ul style="list-style-type: none"> <li>• At least 3 screens (Welcome, Game play, Game Over)</li> <li>• Text, Images, Buttons are present</li> <li>• No Dead Ends - There is a way to navigate to each of the screens (through game-play or clicking a button).</li> <li>• Some effort put toward styling.</li> </ul> <p><b>*HW= finish lessons 3 and 4, and then work on badge</b></p> <p><a href="https://flipgrid.com/appsmash2020">https://flipgrid.com/appsmash2020</a></p>
<p><b>Thurs</b> <b>3.5</b></p>	<p>APPLE users beware....</p> <p><a href="https://www.gadgetsnow.com/tech-news/why-cut-copy-and-paste-may-be-dangerous-on-iphones/articleshow/74295257.cms">https://www.gadgetsnow.com/tech-news/why-cut-copy-and-paste-may-be-dangerous-on-iphones/articleshow/74295257.cms</a></p>
<p><b>Fri</b> <b>3.6</b></p>	<p><b>Mock AP quiz (on lockdown browser)</b></p> <p><b>*U5L3 due by midnight: Alexis, Hannah, Josh, Mason, Rosie</b></p> <p><b>U5L4 due by Sun at 11pm for ALL</b></p>

CODE B=

```
for(var i=10; i>0; i--){
  write(i) ;
}
write('Blast Off!');
```

CODE E=

```

1 penUp();
2 turnLeft();
3 moveForward(100);
4 turnLeft(180);
5 penDown();
6 for(var i=0; i<7; i++){
7     ticMark();
8     moveForward();
9 }
10 ticMark();
11 penUp();
12 moveForward();
13
14 function ticMark() {
15     turnLeft();
16     moveForward(5);
17     turnLeft(180);
18     moveForward(5);
19     turnLeft();
20 }

```

CODE R=

```

for(var angle=-45; angle<=45; angle=angle+5){
    turnTo(angle);
    moveForward(100);
    turnLeft(180);
    moveForward(100);
}
turnTo(180);
moveForward(200);

```

this gets SO cool now..... keep going!!!!!! -->

Code F=

```

drawFlower(5);

function drawFlower(petalCount) {
    penColor("pink");
    penUp();
    for(var i=0; i<360; i=i+(360/petalCount)){
        turnTo(i);
        moveForward(360/petalCount);
        dot((2/3)*360/petalCount);
        moveForward(-360/petalCount);
    }
    penColor("blue");
    dot(360/petalCount/2);
}



```

<-- mess around with this flower, change stuff and see what happens.

Code D=

```
var sum = 0;
for (var i = 0; i < 10000; i++) {
    sum = sum + randomNumber(1,6);
}
console.log(sum/10000);
```

## WARM UPS! Week of 3.2.2020

Mon 3.2	<p>Our word of the day is <b>heuristic</b>. What does it mean???</p> <p>what's the opposite of heuristic?</p>  <p>algorithmic, disinterested, incurious, unskeptical, recursive</p>  <p><a href="https://deepai.org/machine-learning-glossary-and-terms/heuristics">https://deepai.org/machine-learning-glossary-and-terms/heuristics</a></p>
Tue	<p>Use this site and be prepared to explain the coolest thing you researched with your team or the class.</p> <p><a href="https://trends.google.com/trends/?geo=US">https://trends.google.com/trends/?geo=US</a></p>
Wed	<p><b>Consider the code labeled “C.M.” below the warm up...</b></p> <ol style="list-style-type: none"><li><b>1) what does it do?</b></li><li><b>2) How many screens does it need?</b></li><li><b>3) How would you find this script on code.org?</b></li></ol>

Thu r	<p><a href="https://www.youtube.com/watch?v=aWLBmapcJRU">https://www.youtube.com/watch?v=aWLBmapcJRU</a> <a href="https://rosettacode.org/wiki/Sunflower_fractal">https://rosettacode.org/wiki/Sunflower_fractal</a></p> <p>Warm up= reflect on the above and return entire warm up to me by the end of the period.</p>
Fri	What is the number $5F_{16}$ in Decimal??

Dec	Hex	Oct	Bin	Dec	Hex	Oct	Bin	Dec	Hex	Oct	Bin
0	0	000	000000000	16	10	020	00010000	32	20	040	00100000
1	1	001	000000001	17	11	021	00010001	33	21	041	00100100
2	2	002	000000010	18	12	022	00010010	34	22	042	00100100
3	3	003	000000011	19	13	023	00010011	35	23	043	00100100
4	4	004	000000100	20	14	024	00010100	36	24	044	00100100
5	5	005	000000101	21	15	025	00010101	37	25	045	00100100
6	6	006	000000110	22	16	026	00010110	38	26	046	00100100
7	7	007	000000111	23	17	027	00010111	39	27	047	00100100
8	8	010	00001000	24	18	030	00011000	40	28	050	00100100
9	9	011	00001001	25	19	031	00011001	41	29	051	00100100
10	A	012	00001010	26	1A	032	00011010	42	2A	052	00100100
11	B	013	00001011	27	1B	033	00011011	43	2B	053	00100100
12	C	014	00001100	28	1C	034	00011100	44	2C	054	00100100
13	D	015	00001101	29	1D	035	00011101	45	2D	055	00100100
14	E	016	00001110	30	1E	036	00011110	46	2E	056	00100100
15	F	017	00001111	31	1F	037	00011111	47	2F	057	00100100

## C.M.:

```
onEvent("start", "click", function(){
```

```
setScreen("screen2");
```

```
hideElement("start2");
```

```
});
```

```
onEvent("checkno", "click", function(){
```

```
setScreen("screen3");
```

```
});
```

```
onEvent("checkyes", "click", function(){
```

```
showElement("start2");
```

```
});
```

```
onEvent("start2", "click", function(){
```

```
setScreen("screen4");

showElement("directions2");

showElement("cookie1");

hideElement("cookie2");

hideElement("cookie3");

hideElement("cookie4");

hideElement("cookie5");

hideElement("cookie6");

hideElement("cookie7");

setPosition("cookie monster", 233, 344);

});

onEvent("cookie1", "click", function(){

setPosition("cookie monster", 15, 45);

hideElement("cookie1");

hideElement("directions2");

showElement("cookie2");

});

onEvent("cookie2", "click", function(){

setPosition("cookie monster", 220, 205);

hideElement("cookie2");

showElement("cookie3");

});

onEvent("cookie3", "click", function(){

setPosition("cookie monster", 30, 330);

hideElement("cookie3");

showElement("cookie4");

});
```

```
onEvent("cookie4", "click", function(){  
  
setPosition("cookie monster", 230, 30);  
  
hideElement("cookie4");  
  
showElement("cookie5");  
  
});  
  
onEvent("cookie5", "click", function(){  
  
setPosition("cookie monster", 30, 175);  
  
hideElement("cookie5");  
  
showElement("cookie6");  
  
});  
  
onEvent("cookie6", "click", function(){  
  
setPosition("cookie monster", 125, 260);  
  
hideElement("cookie6");  
  
showElement("cookie7");  
  
});  
  
onEvent("cookie7", "click", function(){  
  
setScreen("screen5");  
  
});  
  
onEvent("start over2", "click", function(){  
  
setScreen("screen1");  
  
});
```



## Scoring Guidelines and Notes for the 2019 Exam Administration

Explore – Sample Responses	Create – Sample Responses	Scoring Guidelines	Commentary
<a href="#">Explore A: Artifact</a> <a href="#">Explore A: Written response</a> <a href="#">Explore B: Artifact</a> <a href="#">Explore B: Written response</a> <a href="#">Explore C: Artifact</a> <a href="#">Explore C: Written response</a>	<a href="#">Create A: Video</a> <a href="#">Create A: Written response</a> <a href="#">Create B: Video</a> <a href="#">Create B: Written response</a> <a href="#">Create C: Video</a> <a href="#">Create C: Written response</a>	<a href="#">Scoring Guidelines</a> <a href="#">Chief Reader Report</a>	<a href="#">Explore: Commentary</a> <a href="#">Create: Commentary</a> <a href="#">Scoring Distribution</a>

Explore – Sample Responses	Create – Sample Responses	Scoring Guidelines	Commentary
<a href="#">Explore D: Artifact</a> <a href="#">Explore D: Written response</a> <a href="#">Explore E: Artifact</a> <a href="#">Explore E: Written response</a> <a href="#">Explore F: Artifact</a> <a href="#">Explore F: Written response</a> <a href="#">Explore G: Artifact</a> <a href="#">Explore G: Written response</a> <a href="#">Explore H: Artifact</a> <a href="#">Explore H: Written response</a> <a href="#">Explore I: Artifact</a> <a href="#">Explore I: Written response</a> <a href="#">Explore J: Artifact</a> <a href="#">Explore J: Written response</a>	<a href="#">Create D: Video</a> <a href="#">Create D: Written response</a> <a href="#">Create E: Video</a> <a href="#">Create E: Written response</a> <a href="#">Create F: Video</a> <a href="#">Create F: Written response</a> <a href="#">Create G: Video</a> <a href="#">Create G: Written response</a> <a href="#">Create H: Video</a> <a href="#">Create H: Written response</a> <a href="#">Create I: Video</a> <a href="#">Create I: Written response</a> <a href="#">Create J: Video</a> <a href="#">Create J: Written response</a>		

Notes for evans only: [https://apclassroom.collegeboard.org/103/question\\_bank/create](https://apclassroom.collegeboard.org/103/question_bank/create)

## Syntax

```

1 for (initialization; condition; increment) {
2   // block of statements
3 }
```

Here is a typical construct for loop used to count from 0 to 3 to execute the block of code 4 times:

```
for(var i = 0; i < 4; i++)
```

**initialization** `var i = 0;` is executed once, before anything else. Create an identifier named *i* and initialize it to 0.

**condition** `i < 4;` is checked before each iteration, to see if the block of statements should execute or not. If *i* is less than 4.

**increment** `i++` is executed after every iteration, after the block of statements is executed. Increase (increment) *i* by 1.