

Yesterday Review

+ Today Kim's Game

1. Name 4 views. Spelling counts.

1. Name 4 views. Spelling counts.

EditText

ImageView

TextView

Button

2. Name as many attributes as you can.

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`id`

`margin`

`Layout_height`

`padding`

`Layout_width`

`text`

`onClick`

`Layout_gravity`

`textSize`

`textColor`

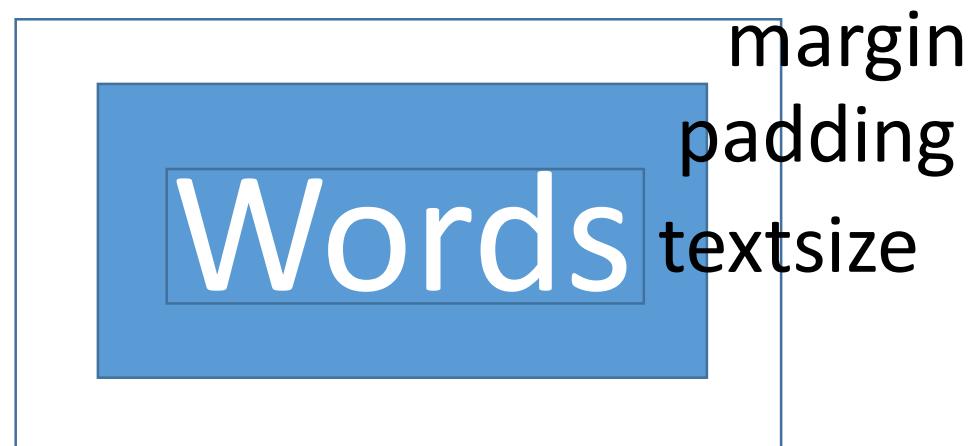
`background`

`Src`

`orientation`

3. Draw a diagram that explains the difference between margins, padding and textSize.

3. Draw a diagram that explains the difference between margins, padding and textSize.



4. On a view, the textSize is 20dp. The margins are 10dp and the padding is 30dp. What is the height allocated to the widget when drawn on the screen?

4. On a view, the textSize is 20dp. The margins are 10dp and the padding is 30dp. What is the height allocated to the widget when drawn on the screen?



10
30
20
30
10

100 dp

5. What starts and ends a tag?

5. What starts and ends a tag?

<

/ >

6. Name 4 ways to specify size

6. Name 4 ways to specify size

Wrap_content

Match_parent

DP

SP

Widget Memorize

+ Yesterday Widgets

```
<TextView  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:padding="10dp"  
    android:text="Title"  
    android:textSize="16sp" />
```



```
<LinearLayout  
    android:layout_width="match_parent"  
    android:layout_height="match_parent"  
    android:orientation="vertical">  
  
</LinearLayout>
```



```
Button BID = (Button) findViewById(R.id.BID) ;  
EditText ETID = (EditText) findViewById(R.id.ETID) ;  
TextView TVID = (TextView) findViewById(R.id.TVID) ;  
ImageView IVID = (Button) findViewById(R.id.IVID) ;
```



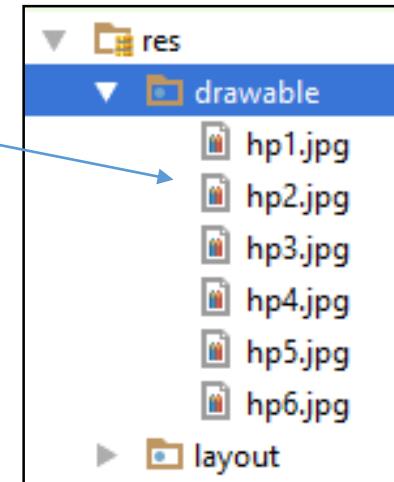
```
<Button  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Words"  
    android:id="@+id/ButtonID"  
    android:onClick="MethodName"  
    android:layout_gravity="center"  
    android:textSize="20dp"/>
```

```
public void MethodName(View view) {  
    Button BID = (Button) findViewById(R.id.BID) ;  
    BID.setText("Changed Text");  
}
```



Some code snippets:

```
public void clicked(View view) {  
    TextView txt = (TextView) findViewById(R.id.txt);  
    ImageView pic = (ImageView) findViewById(R.id.pic);  
    EditText write = (EditText) findViewById(R.id.write);  
  
    String word = write.getText().toString();  
    txt.setText(word);  
    pic.setImageResource(R.drawable.hp2);  
    pic.setEnabled(false);  
  
    int num = Integer.parseInt(word);  
    int rNum = (int) (Math.random() * 3 + 1);  
  
    txt.setText(num + " " + rNum);  
}
```



Circle the View that needs an id on the screen AND in the code.

Join Code

Enter your Join Code Below and the button.

CLICK ME

```
<TextView  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:padding="30dp"  
    android:text="Join Code"  
    android:textSize="50sp" />  
  
<TextView  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:text="Enter your Join Code Below and the button."  
    android:textSize="18sp" />  
  
<EditText  
    android:layout_width="300dp"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:padding="40dp"  
    android:textSize="50sp" />  
  
<Button  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:layout_margin="30dp"  
    android:text="Click Me"  
    android:textSize="50sp" />
```

Circle the View that
needs an onClick on the
screen AND in the code.

Join Code

Enter your Join Code Below and the button.

CLICK ME

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:padding="30dp"
    android:text="Join Code"
    android:textSize="50sp" />

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:text="Enter your Join Code Below and the button."
    android:textSize="18sp" />

<EditText
    android:layout_width="300dp"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:padding="40dp"
    android:textSize="50sp" />

<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:layout_margin="30dp"
    android:text="Click Me"
    android:textSize="50sp" />
```

Join Code

Enter your Join Code Below and the button.

CLICK ME

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:padding="30dp"
    android:text="Join Code"
    android:textSize="50sp" />
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:text="Enter your Join Code Below and the button."
    android:textSize="18sp" />
<EditText
    android:id="@+id/code"
    android:layout_width="300dp"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:padding="40dp"
    android:textSize="50sp" />
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:layout_margin="30dp"
    android:onClick="join"
    android:text="Click Me"
    android:textSize="50sp" />
```

Circle where you would find the method name in the XML

Join Code

Enter your Join Code Below and the button.

CLICK ME

Java

```
public void _____(View view) {  
}  
}
```

XML

```
<EditText  
    android:id="@+id/code"  
    android:layout_width="300dp"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:padding="40dp"  
    android:textSize="50sp" />  
<Button  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:layout_margin="30dp"  
    android:onClick="join"  
    android:text="Click Me"  
    android:textSize="50sp" />
```

Circle the widget
that you need to
findViewByld
(handle inflation)

Join Code

Enter your Join Code Below and the button.

CLICK ME

Java

```
public void join(View view) {  
}
```

XML

```
<EditText  
    android:id="@+id/code"  
    android:layout_width="300dp"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:padding="40dp"  
    android:textSize="50sp" />  
<Button  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:layout_margin="30dp"  
    android:onClick="join"  
    android:text="Click Me"  
    android:textSize="50sp" />
```

Circle where you would find the id of the inflated widget in the XML

Join Code

Enter your Join Code Below and the button.

CLICK ME

Java

```
public void join(View view) {  
    EditText _____ = (EditText) findViewById(R.id._____);  
}
```

XML

```
<EditText  
    android:id="@+id/code"  
    android:layout_width="300dp"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:padding="40dp"  
    android:textSize="50sp" />  
<Button  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:layout_margin="30dp"  
    android:onClick="join"  
    android:text="Click Me"  
    android:textSize="50sp" />
```

Circle where you declared an EditText in the Java.

Join Code

Enter your Join Code Below and the button.

CLICK ME

Java

```
public void join(View view) {  
    EditText code = (EditText) findViewById(R.id.code);  
    String c = code.getText().toString();  
    code.setText("");  
}
```

XML

```
<EditText  
    android:id="@+id/code"  
    android:layout_width="300dp"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:padding="40dp"  
    android:textSize="50sp" />  
<Button  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:layout_margin="30dp"  
    android:onClick="join"  
    android:text="Click Me"  
    android:textSize="50sp" />
```

Circle where you
got the text out of
the Edit Text

Java

```
public void join(View view) {  
    EditText code = (EditText) findViewById(R.id.code);  
    String c = code.getText().toString();  
    if(c.equals("12345"))  
        Toast.makeText(getApplicationContext(), "You have joined", Toast.LENGTH_SHORT).show();  
    else  
        Toast.makeText(getApplicationContext(), "Join code is incorrect", Toast.LENGTH_SHORT).show();  
    code.setText("");  
}
```

Join Code

Enter your Join Code Below and the button.

CLICK ME

What is the
correct join code?
Circle it.

Java

```
public void join(View view) {  
    EditText code = (EditText) findViewById(R.id.code);  
    String c = code.getText().toString();  
    if(c.equals("12345"))  
        Toast.makeText(getApplicationContext(), "You have joined", Toast.LENGTH_SHORT).show();  
    else  
        Toast.makeText(getApplicationContext(), "Join code is incorrect", Toast.LENGTH_SHORT).show();  
    code.setText("");  
}
```

Join Code

Enter your Join Code Below and the button.

CLICK ME

What appears on the screen if the correct join code is entered? Circle it.

Java

```
public void join(View view) {  
    EditText code = (EditText) findViewById(R.id.code);  
    String c = code.getText().toString();  
    if(c.equals("12345"))  
        Toast.makeText(getApplicationContext(), "You have joined", Toast.LENGTH_SHORT).show();  
    else  
        Toast.makeText(getApplicationContext(), "Join code is incorrect", Toast.LENGTH_SHORT).show();  
    code.setText("");  
}
```

Join Code

Enter your Join Code Below and the button.

CLICK ME

How do you clear the
EditText, so the user can
enter a new value? Circle it.

Java

```
public void join(View view) {  
    EditText code = (EditText) findViewById(R.id.code);  
    String c = code.getText().toString();  
    if(c.equals("12345"))  
        Toast.makeText(getApplicationContext(), "You have joined", Toast.LENGTH_SHORT).show();  
    else  
        Toast.makeText(getApplicationContext(), "Join code is incorrect", Toast.LENGTH_SHORT).show();  
    code.setText("");  
}
```

Join Code

Enter your Join Code Below and the button.

CLICK ME

```
public void join(View view {
```

Handle Inflation

```
    EditText code = (EditText) findViewById(R.id.code);
```

Get stuff out of EditText

```
    String c = code.getText().toString();
```

Process stuff from EditText

```
    if(c.equals("12345"))
```

```
        Toast.makeText(getApplicationContext(), "You have joined", Toast.LENGTH_SHORT).show();
```

```
    else
```

```
        Toast.makeText(getApplicationContext(), "Join code is incorrect", Toast.LENGTH_SHORT).show();
```

Clear EditText

```
    code.setText("");
```

```
}
```



```
<EditText  
    android:id="@+id/temp"  
    android:layout_width="150dp"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:layout_margin="10dp"  
    android:textSize="50sp" />  
  
<Button  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:layout_margin="10dp"  
    android:onClick="celsius"  
    android:text="Celsius (Canada)"  
    android:textSize="20sp" />  
  
<Button  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:layout_margin="10dp"  
    android:onClick="fahrenheit"  
    android:text="Fahrenheit (USA)"  
    android:textSize="20sp" />  
  
<TextView  
    android:id="@+id/result"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:layout_margin="10dp"  
    android:text="No data entered"  
    android:textSize="40sp" />
```

Circle all the pieces of information you will need in the java code.



Circle where the button's onClick appeared.

```
public void celsius(View view) {  
    EditText temp = (EditText) findViewById(R.id.temp);  
    TextView result = (TextView) findViewById(R.id.result);  
  
    double t = Double.parseDouble(temp.getText().toString());  
    if (t >= 37.8)  
        result.setText("Fever");  
    else  
        result.setText("No Fever");  
  
    temp.setText("");  
}
```

Circle where you handle inflation.

```
public void celsius(View view) {  
    EditText temp = (EditText) findViewById(R.id.temp) ;  
    TextView result = (TextView) findViewById(R.id.result) ;  
  
    double t = Double.parseDouble(temp.getText().toString()) ;  
    if (t>=37.8)  
        result.setText ("Fever") ;  
    else  
        result.setText ("No Fever") ;  
  
    temp.setText ("") ;  
}
```

Circle where we get the number from the EditText

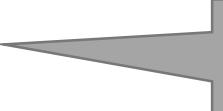
```
public void celsius(View view) {  
    EditText temp = (EditText) findViewById(R.id.temp) ;  
    TextView result = (TextView) findViewById(R.id.result) ;  
  
    double t = Double.parseDouble(temp.getText().toString()) ;  
    if (t>=37.8)  
        result.setText ("Fever") ;  
    else  
        result.setText ("No Fever") ;  
  
    temp.setText ("") ;  
}
```



Circle where we change the
TextView on the screen.

```
public void celsius(View view) {  
    EditText temp = (EditText) findViewById(R.id.temp);  
    TextView result = (TextView) findViewById(R.id.result);  
  
    double t = Double.parseDouble(temp.getText().toString());  
    if (t >= 37.8)  
        result.setText("Fever");  
    else  
        result.setText("No Fever");  
  
    temp.setText("");  
}
```

To do the other button, you'd just cut and paste this code and make a few changes.



Change the method so that it can calculate using Fahrenhuit (100)

```
public void celsius(View view) {  
    EditText temp = (EditText) findViewById(R.id.temp) ;  
    TextView result = (TextView) findViewById(R.id.result) ;  
  
    double t = Double.parseDouble(temp.getText().toString()) ;  
  
    if(t>=37.8)  
        result.setText("Fever") ;  
    else  
        result.setText("No Fever") ;  
  
    temp.setText("") ;  
}
```