Speaker

- use a breadboard for connecting it to your Arduino
- note: there is an additional “ground” pin on the digital pin side of the board, used in this schematic. There is no difference to the other two “ground” pins.
- check out the program: this one has all action all in the “setup” part, and nothing in “loop”.
Sample Code: making music!

/*
Plays a melody
created 21 Jan 2010  modified 30 Aug 2011  by Tom Igoe
This example code is in the public domain.
*/

#include "pitches.h"

int melody[] = {
    NOTE_C4, NOTE_G3, NOTE_G3, NOTE_A3, NOTE_G3, 0, NOTE_B3, NOTE_C4};

int noteDurations[] = {
    4, 8, 8, 4, 4, 4, 4, 4};

void setup() {
    // iterate over the notes of the melody:
    for (int thisNote = 0; thisNote < 8; thisNote++) {
        // to calculate the note duration, take one second
        // divided by the note type.
        // e.g. quarter note = 1000 / 4, eighth note = 1000/8, etc.
        int noteDuration = 1000 / noteDurations[thisNote];
        tone(8, melody[thisNote], noteDuration);
        // to distinguish the notes, set a minimum time between them.
        // the note's duration + 30% seems to work well:
        int pauseBetweenNotes = noteDuration * 1.30;
        delay(pauseBetweenNotes);
        noTone(8);
    }
}

void loop() {
    // no need to repeat the melody.
}

Source:
http://arduino.cc/en/Tutorial/Tone