CoderDojo Athenry
"Above all, be cool"

Notes by Michael Madden, Oliver Thompson & Michael Finn, 2012

Gairmscoil Mhuire VEC
Saturdays, 12-2pm

Today

Get info

Ask questions

Registration forms

What Ages?

All ages!

Pre-Teen to Young Adult

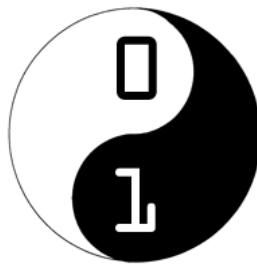Parents too!

Volunteers Needed!

Parents or others

Women and men

Bring

SNACK (if you wish)

LAPTOP (with wifi)

PARENT (u13 accompanied)

3 Streams – 1 Room

Scratch Beginners

Scratch Advanced

Python Beginners

Others? Small team of older ninjas to build a website for CoderDojo Athenry?

3 Streams – 1 Room

Collaborate

Switch Around

Help Each Other

3 Streams – 1 Room

- I'm new
- I'd like to recap

Scratch Beginners

Scratch Advanced

- Bigger projects
- Teamwork
- Design

Python Beginners

- Text based
- Can go further

Belts

Belts

Separate yellow/blue belts for each language

Belts

White: Commitment & Basic Skill

Attend at least 5 sessions
+ Know how to get started with Scratch

Sign in each week!

Belts

Yellow Scratch Belt: Competent Scratch Coder

Earn a White Belt

+ Write Scratch Programs

+ Understand key features
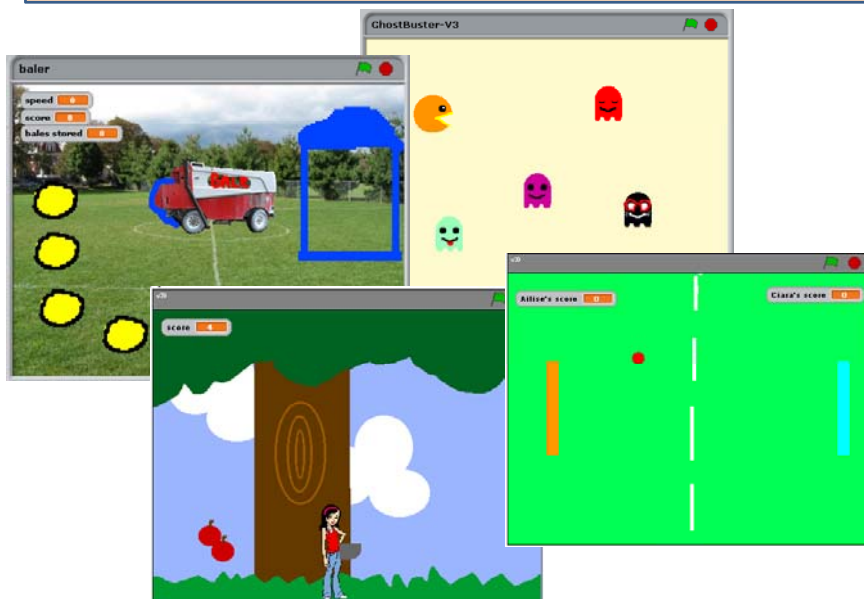   **(Loops, decisions, variables, sprite control,**
   animation, sound)

Belts

Blue Scratch Belt: Advanced Scratch Coder

Earn a Yellow Belt

+ Complex Project

+ Teamwork

+ Design

+ Social Good

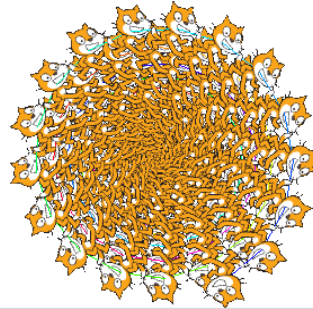# Scratch Projects by our Ninjas

More Scratch:

Graphics
Using Pen and Stamp

```
repeat 200
stamp
change size by 0.1
move iSize steps
turn ↻ iTurn degrees
change iSize by 0.2
change iTurn by -0.1
wait 0.1 secs
```

More Scratch Animation

Special Effects
Uses a little maths :)
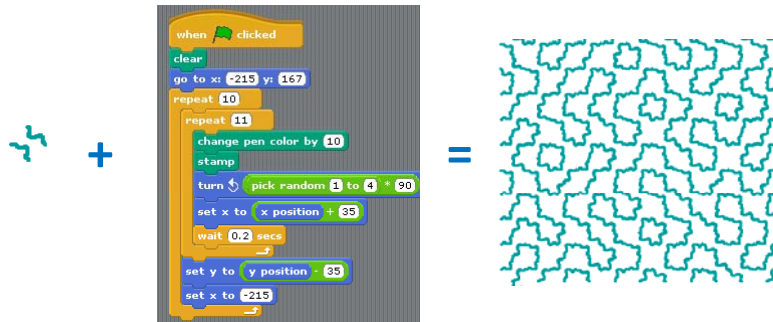## Spinning Wagon Wheel

```
when ⚑ clicked
set Spin to 0
forever
  if key up arrow pressed?
    change Spin by 1
    wait 0.1 secs
  if key down arrow pressed?
    change Spin by -1
    wait 0.1 secs
```
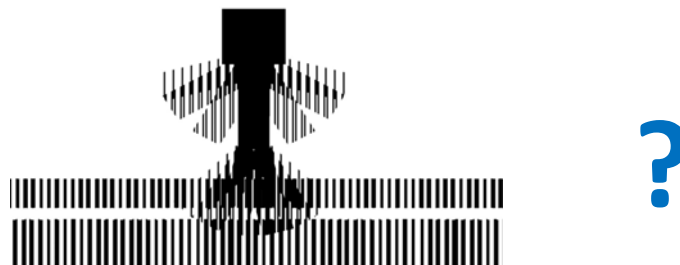
Scratch Art

Truchet Patterns – WHAT!
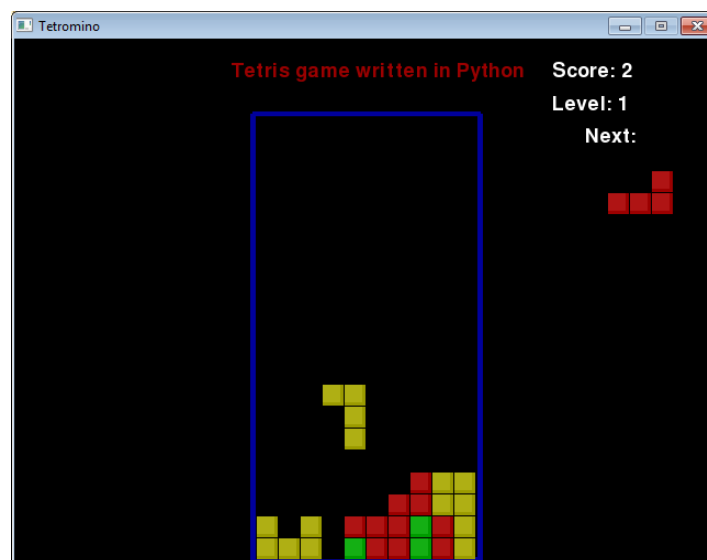### Simple Designs – Amazing Art!

Scratch Art

Optical Illusions…

Scratch Skills

Variables
Pen Stamping and Colours
Slider Controls
Loops
Simple Maths

Example: Python

What is Python?

- **General-purpose high-level language**
- **Many real world applications**
- **Emphasizes code readability**
- **Syntax is clear and expressive**
- **Comprehensive standard library**

What is Python Used For?

- **Processing text, numbers, images, scientific data**
- **Used in Google:**
  Search Engine, GMail, YouTube
- **NASA**
- **New York Stock Exchange**

Weekly Notes & Updates

Make sure you are on the Athenry Parents/Kids Google Group:

See http://zen.coderdojo.com/dojo/**53**

Or email: coderdojoathenry@gmail.com

Twitter: **@coderdojoathenr**