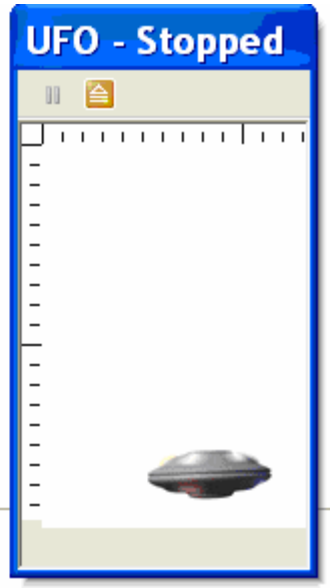
KPL

(Kids Programming Language)

Learning is Best
When Learning is Fun!

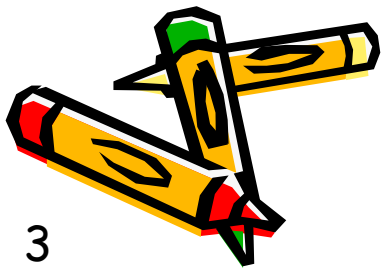
KPL-easy

```
1  Program UFO
2
3      Method Main()
4
5          Define myUFO As Sprite
6          myUFO = LoadSprite( "UFO", "UFO.GIF" )
7          myUFO.MoveTo( 50, 0 )
8          myUFO.Show()
9
10         Define ufoY As Integer
11         For ufoY = 1 To 150
12             Delay(10)
13             myUFO.MoveTo( 50, ufoY)
14         Next
15     End Method
16
17 End Program
```

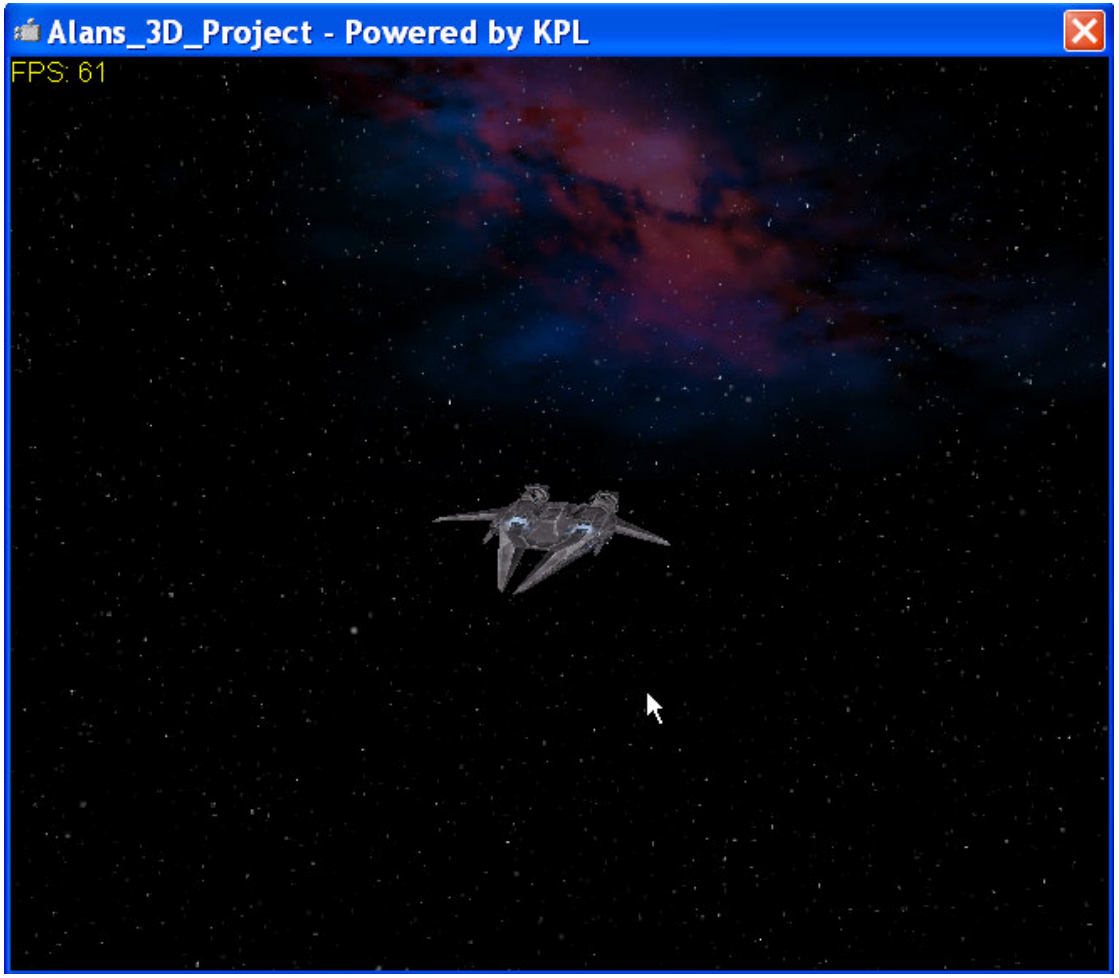


Why easy?

- A future accountant or math teacher or engineer or scientist starts learning **simple** addition and multiplication in elementary school.
- In high school and university students begin to **apply** math to accounting or science or engineering.
- Similarly with KPL, students **start** to learn computer programming in an **easy** way.
  - Though KPL **starts** easy, there is **much** real computer science to learn in KPL. And KPL prepares students well to "graduate" to other modern languages.



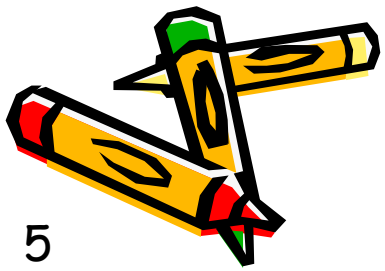
KPL-fun



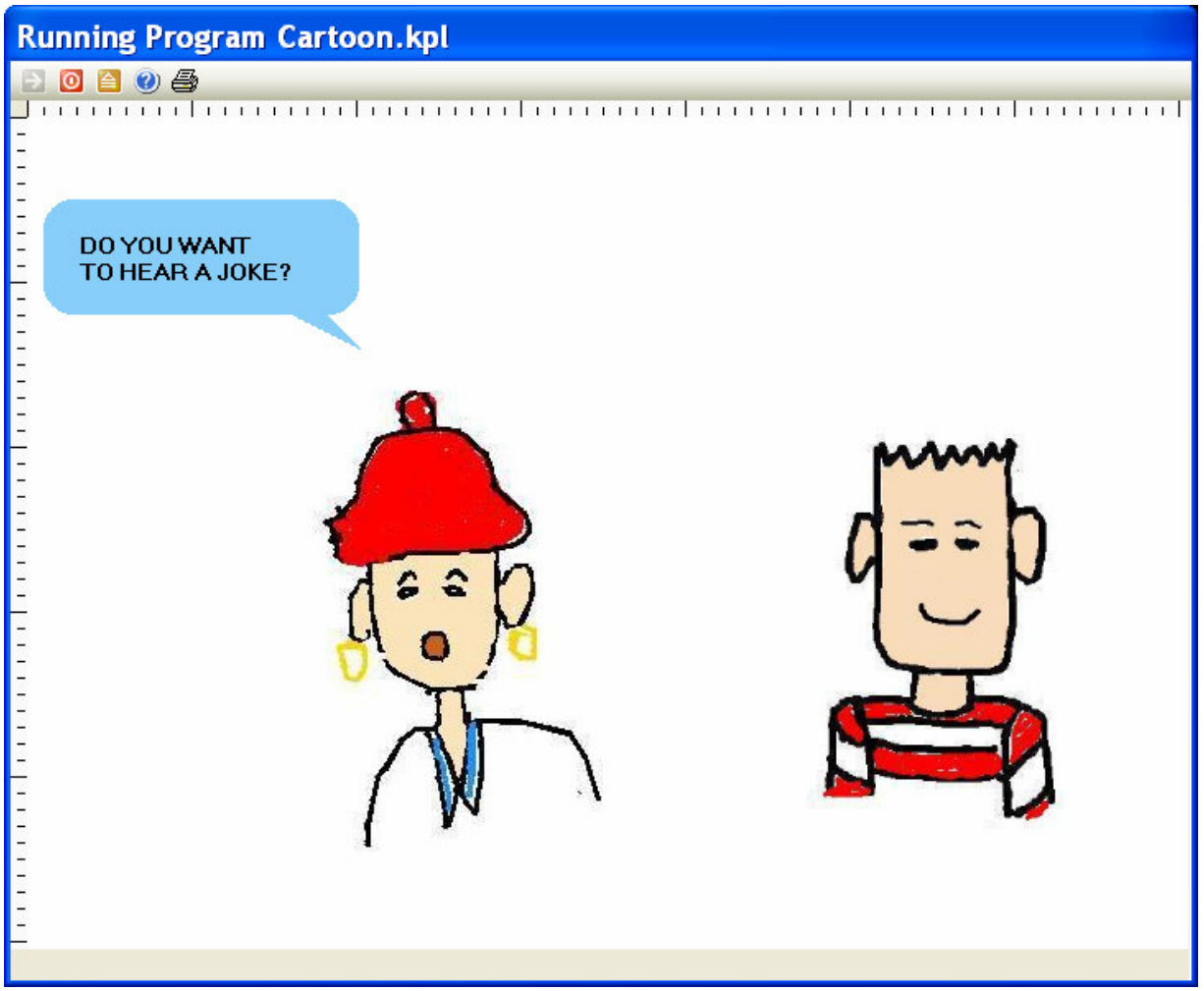
KPL v 2 allows a beginning programmer to display and control a 3D spaceship model – with 45 simple instructions!

Why fun?

- Students learn best when the learning is fun.
- Learning programming as a skill is best begun through creation of **games** or **digital art** – because while this is real programming, it is **also** fun and engaging.
- Even for other subjects, such as math or physics or vocabulary, KPL can make learning very **interactive**, and can disguise the learning as a game.
- Computer games now **interest and engage** people all around the world, of both genders, and all ages.



KPL-creative



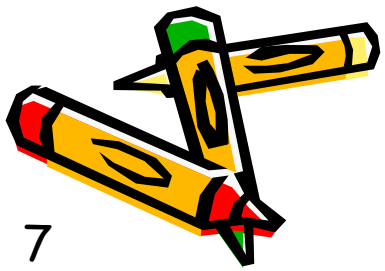
This KPL cartoon was drawn and written by the user as well as programmed. It could just as easily have used recorded voices!

Why creative?

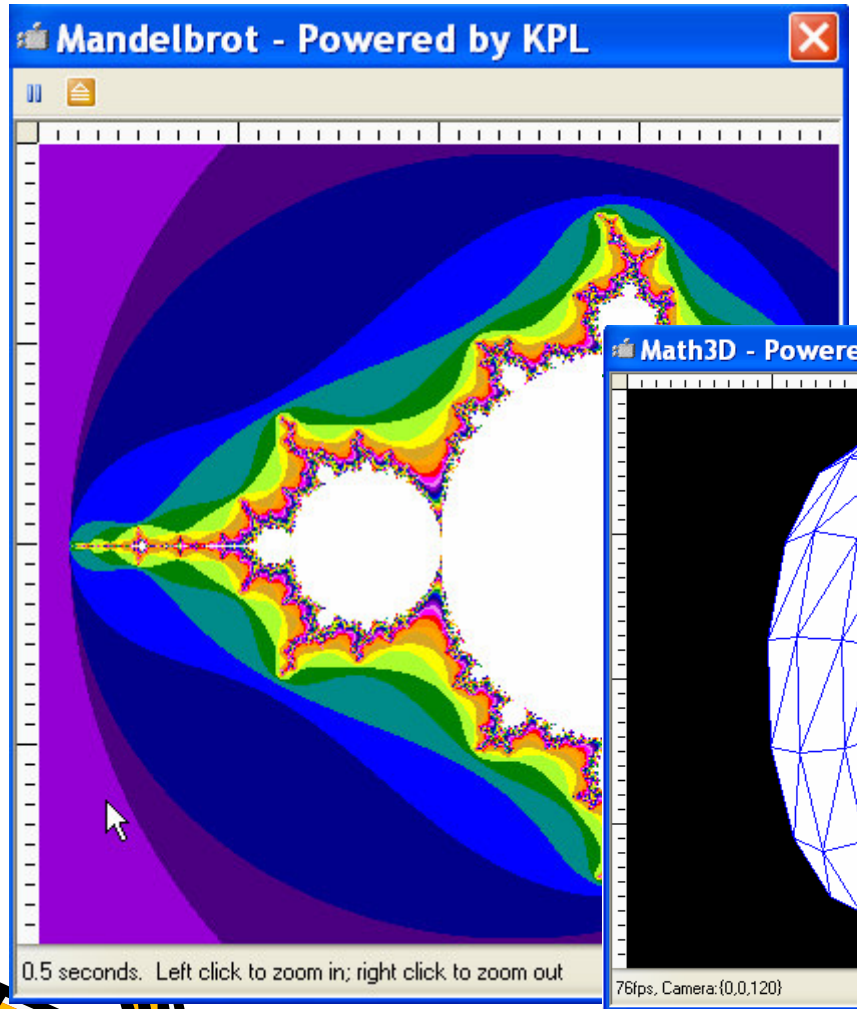
- Enabling beginners to express their imaginations and creativity is a very important goal for KPL, because it's an important **encouragement** for any student.

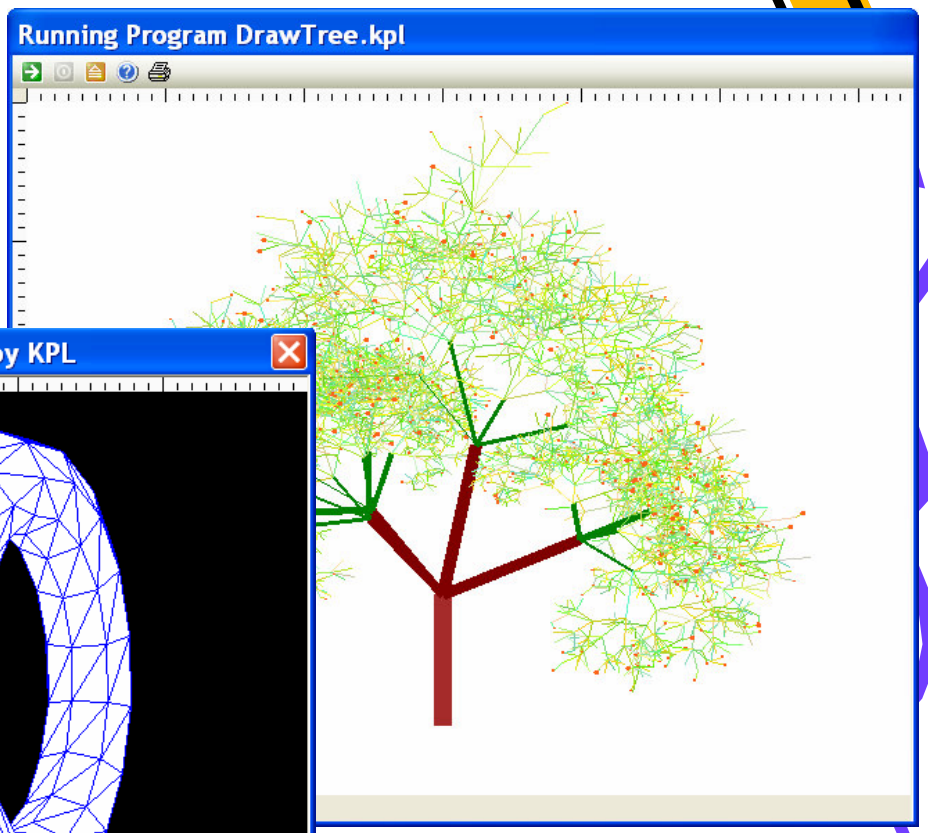
- Some beginners are more interested in **art** or **sound** or **stories** than they are in programming. KPL works just as well for them, by allowing them to emphasize their own interests in the KPL programs they create.

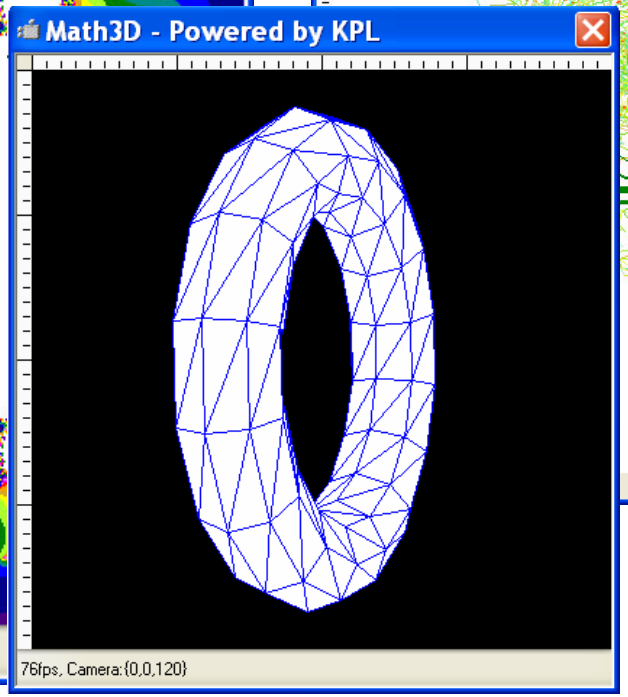
  - Even if a beginner's interest is in art or sound or stories, they will learn the basics of KPL in order to use those in a program. And they will have fun doing it!



KPL-STEM







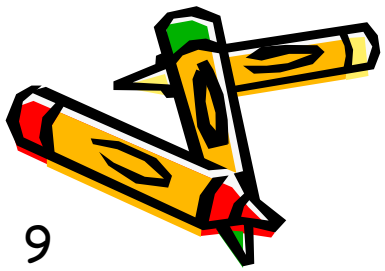
STEM is an abbreviation for Science, Technology, Engineering and Math.
KPL is ideal for interactively exploring and learning such subjects.

Why STEM?

- **Science**, **Technology**, **Engineering** and **Math** are disciplines which are interesting, challenging, and can be the basis of excellent careers.

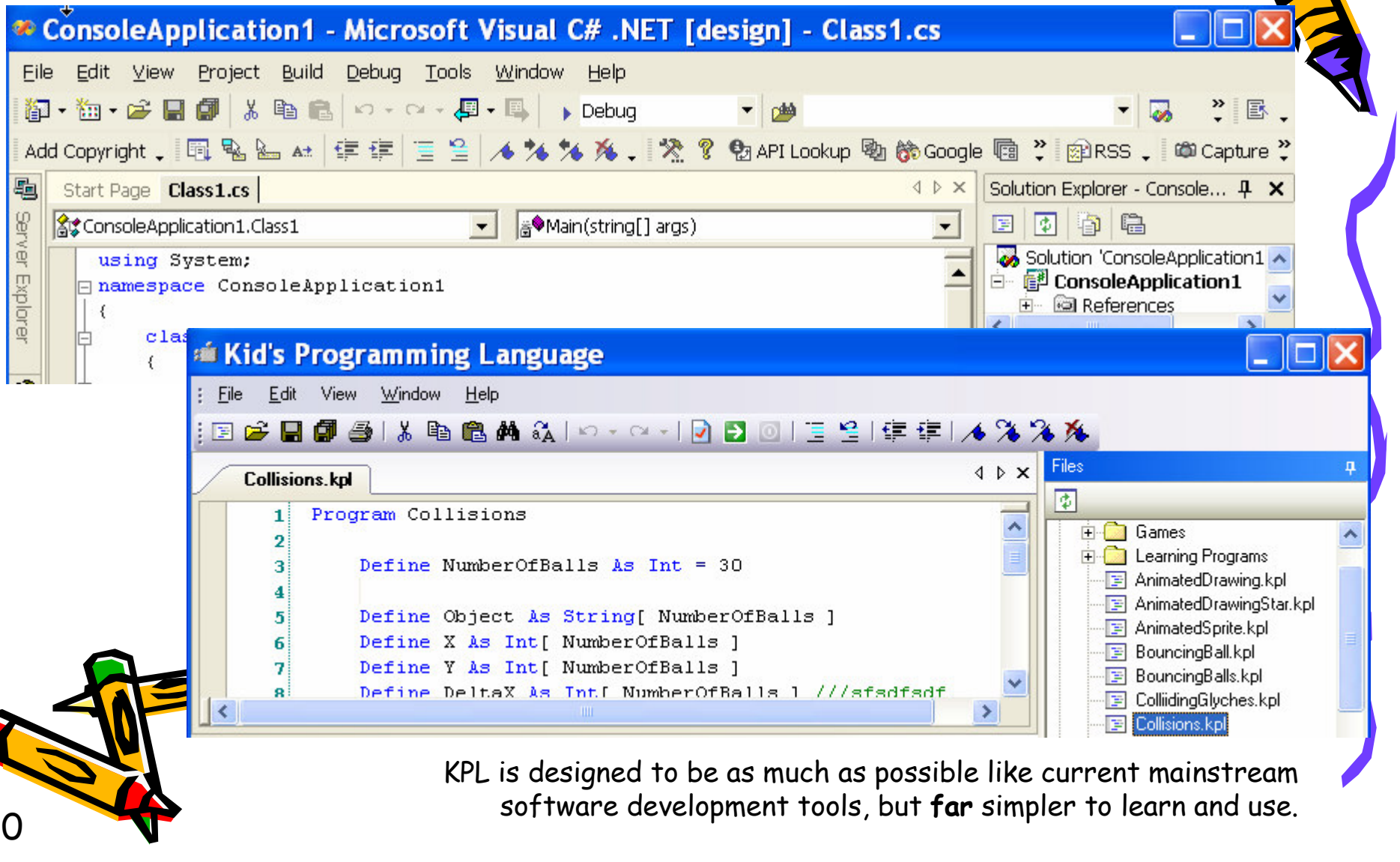
- These careers are also critical to the **technological futures** – and thus the economies - of all countries.

- STEM careers are open to all students – all they need is **access** and **encouragement** in their study.



- STEM careers have an **unfortunate gender bias** toward males. Introducing girls to these concepts at a young age is the best way to change this.

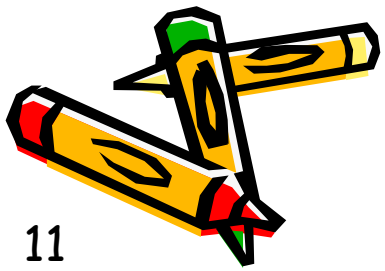
KPL-preparatory



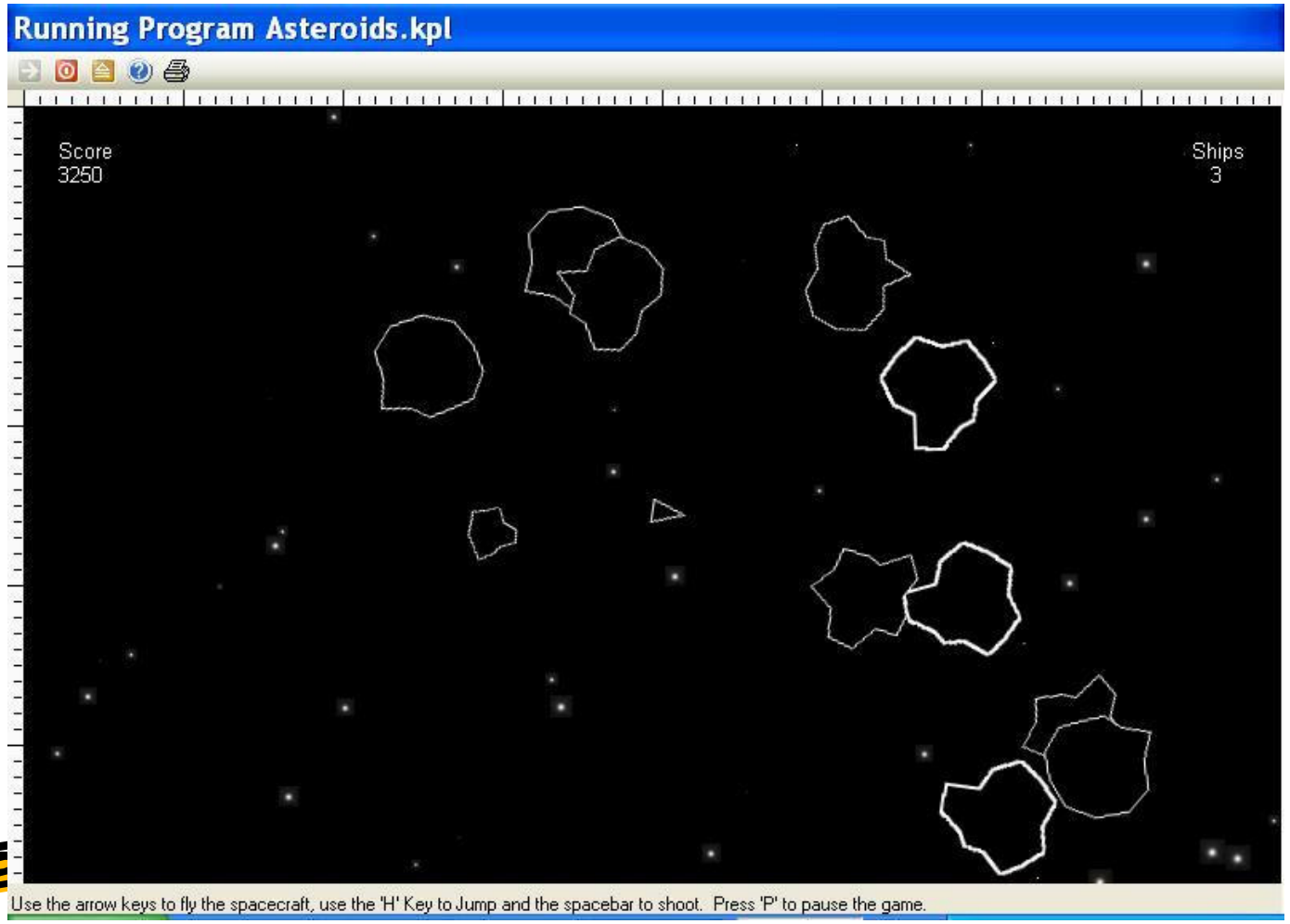
KPL is designed to be as much as possible like current mainstream software development tools, but **far** simpler to learn and use.

Why preparatory?

- The success of previous beginner programming languages such as LOGO was limited because they did **not** prepare users to "graduate" to mainstream languages and tools.
- KPL is carefully designed to be consistent with the most popular programming languages and tools in use today, including Java, Python, VB.NET, C#, Eclipse and Visual Studio. This is the best way to enable students who will progress further as programmers.
- Even students who do not pursue programming further will benefit from learning and practicing standard computer and software usage.



KPL-progressive



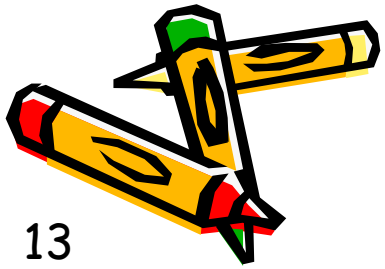
Progressive in this sense means that there are **years** of learning and progress available to students and teachers within KPL.

Why progressive?

- Particularly for the youngest students, it is critical that there are **years** of learning and growth and creativity available within KPL.

- It is primarily university-level Computer Science curriculums which will require students to move beyond KPL's features and capabilities.

- Some of the advanced topics available for study with KPL include trigonometry, physics, digital animation (2D or 3D), interactive code debugging, recursion, graphing and vector math, class-based programming, and using and creating software class libraries that extend KPL's capabilities.

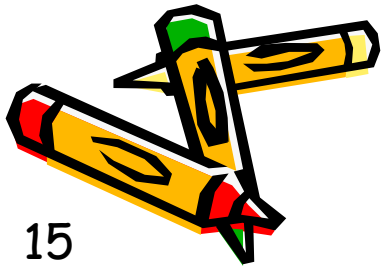


KPL-success

KPL was downloaded 90,000 times in its first nine months – and is only getting started! And KPL is already available in 18 international languages.

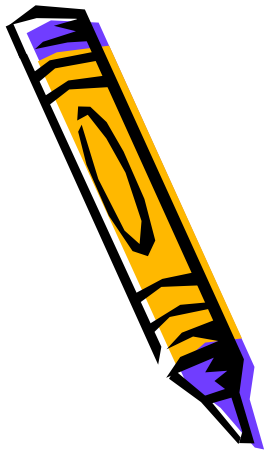
Why success?

- Because no one has been thinking about beginning programmers for 20 years.
- Because computer and software skills are valuable personally, nationally, and globally.
- Because games and graphics are the best possible ways to interest beginners in learning to program.
- Because there is a Computer Science crisis in much of the world, and KPL is ideal for addressing it.



- Because KPL is as much fun as it looks!

You're Invited!



- Website: www.k-p-l.org
- We welcome volunteer participation in the community
- Can you help spread the word? KPL to date has had $0 of outside assistance, and no advertising or PR