

# Random

Random : Object

## Creating and Freeing Instances

- |                |                                      |
|----------------|--------------------------------------|
| + <b>alloc</b> | Allocates and returns a new instance |
| - <b>free</b>  | Frees an instance                    |

## Initializing a New Instance

- |  |  |
|--|--|
| - <b>init</b>                                | Initializes a new instance with seeds from system time |
| - <b>initSeeds:(int)s1 :(int)s2 :(int)s3</b> | Initializes a new instance with given seeds            |

## Seed Operations

- |   |                                       |
|---|---------------------------------------|
| - <b>newSeeds</b>                                 | Gets new seeds from system time       |
| - <b>setSeeds:(int)s1 :(int)s2 :(int)s3</b>       | Sets seeds to those given             |
| - <b>getSeeds:(int *)s1 :(int *)s2 :(int *)s3</b> | Stuffs seeds into int variables given |

## Getting Random Numbers

- |  |  |
|--|--|
| - (int) <b>rand</b>                          | Returns an int from 0 to 32767               |
| - (int) <b>randMax:(int)max</b>              | Returns an int from 0 to <i>max</i>          |
| - (int) <b>randMin:(int)min max:(int)max</b> | Returns an int from <i>min</i> to <i>max</i> |
| - (float) <b>percent</b>                     | Returns a float from 0.0 to 1.0              |

## Rolling Dice

- |   |   |
|---|---|
| - (int) <b>rollDie:(int)numSides</b>  | Returns an int from 1 to <i>numSides</i>                          |
| - (int) <b>roll:(int)numRolls die:(int)numSides</b>                                   | Returns an int from <i>numRolls</i> to <i>numRolls * numSides</i> |
| - (int) <b>rollBest:(int)numWanted<br/>  of:(int)numRolls<br/>  die:(int)numSides</b> | Returns the best <i>numWanted</i> of <i>numRolls</i> rolls        |

## Archiving

- **read:**(NXTypedStream \*)*stream*
- **write:**(NXTypedStream \*)*stream*

Reads a Random from *stream*

Writes a Random to *stream*