**Mission**
Move the Broken Pipe so it is completely in Base.

**20 points**

<table>
<thead>
<tr>
<th>Attachment(s):</th>
<th>Programming: (details on back)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setup Notes:</td>
<td>Run:</td>
</tr>
<tr>
<td></td>
<td>Name:</td>
</tr>
</tbody>
</table>

**Mission 1: Pipe Removal**
<table>
<thead>
<tr>
<th>Mission</th>
<th>25 points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mission</strong></td>
<td></td>
</tr>
<tr>
<td>Move a Big Water (one time maximum) to the other team’s field only by turning the Pump System’s valve(s).</td>
<td></td>
</tr>
<tr>
<td><strong>Attachment(s):</strong></td>
<td><strong>Programming:</strong> (details on back)</td>
</tr>
<tr>
<td><strong>Setup Notes:</strong></td>
<td>Run:</td>
</tr>
<tr>
<td></td>
<td>Name:</td>
</tr>
</tbody>
</table>

**Mission 2: Flow**
<table>
<thead>
<tr>
<th>Mission</th>
<th>20 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move the Pump Addition so it has contact with the mat and that contact is completely in the Pump Addition target.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attachment(s):</th>
<th>Programming: (details on back)</th>
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</thead>
<tbody>
<tr>
<td>Setup Notes:</td>
<td>Run:</td>
</tr>
<tr>
<td></td>
<td>Name:</td>
</tr>
</tbody>
</table>

**Mission 3: Pump Addition**
<table>
<thead>
<tr>
<th>Mission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make at least one Rain come out of the Rain Cloud.</td>
</tr>
</tbody>
</table>

| 20 points |

| Attachment(s): |
| Setup Notes: |

| Programming: (details on back) |
| Run: |
| Name: |

**Mission 4: Rain**
<table>
<thead>
<tr>
<th>Mission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move the Filter north until the lock latch drops.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>30 points</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Attachment(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming: (details on back)</td>
</tr>
<tr>
<td>Run:</td>
</tr>
<tr>
<td>Name:</td>
</tr>
</tbody>
</table>

Mission 5: Filter
### Mission 6: Water Treatment

**Mission**

Make the Water Treatment model eject its Big Water, only by moving the Toilet’s lever.

<table>
<thead>
<tr>
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<th>Programming: (details on back)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setup Notes:</td>
<td>Run:</td>
</tr>
<tr>
<td></td>
<td>Name:</td>
</tr>
</tbody>
</table>

20 points
<table>
<thead>
<tr>
<th>Mission</th>
<th>20 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make the Fountain’s middle layer rise some obvious height and stay there, due only to a Big Water in the gray tub.</td>
<td></td>
</tr>
</tbody>
</table>

**Attachment(s):**

**Setup Notes:**

**Programming:** (details on back)

**Run:**

**Name:**

---

**Mission 7: Fountain**
Mission

Flip Manhole Cover(s) over, obviously past vertical without it/them ever reaching base.

BONUS: Score Manhole Cover points as described above with both covers completely in separate Tripod targets.

<table>
<thead>
<tr>
<th>Mission 8: Manhole Covers</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 /each +3 0 points</td>
</tr>
</tbody>
</table>

Attachment(s):

Setup Notes:

Programming: (details on back)

Run:

Name:
Mission

Move the inspection camera Tripod
FOR PARTIAL SCORE: partly in either Tripod target, with all of its feet touching the mat.
FOR FULL SCORE: completely in either Tripod target, with all of its feet touching the mat.

15 or 20 points

Mission 9: Tripod
Mission

*(Install the Optional Loop first, in Base, if you wish.*) Move a New Pipe so it is where the broken one started, in full/flat contact with the mat.

20 points

Mission 10: Pipe Replacement
**Mission**

*(Install the Optional Loop rst, in Base, if you wish.)* Move a New Pipe so it is
For Partial Score: partly in its target, in full/flat contact with the mat.
For Full Score: completely in its target, in full/flat contact with the mat.

<table>
<thead>
<tr>
<th>Mission 11: Pipe Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 or 20 points</td>
</tr>
</tbody>
</table>

**Attachment(s):**

**Setup Notes:**

**Programming:** (details on back)

**Run:**

**Name:**
<table>
<thead>
<tr>
<th>Mission</th>
<th>30 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move the Sludge so it is touching the visible wood of any of the six drawn garden boxes.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attachment(s):</th>
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</tr>
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<tbody>
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</tr>
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<td>Name:</td>
</tr>
</tbody>
</table>

**Mission 12: Sludge**
### Mission

Make the Flower rise some obvious height and stay there, due only to a Big Water in the brown pot. FOR BONUS: Score Flower Points as described above WITH at least one Rain in the purple part, touching nothing but the Flower model.

<table>
<thead>
<tr>
<th>Mission</th>
<th>30 + 30 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### Attachment(s):

### Setup Notes:

### Programming: (details on back)

Run:

Name:

### Mission 13: Flower
**Mission**

Move the Water Well so it has contact with the mat and that contact is FOR PARTIAL SCORE: partly in the Water Well target. FOR FULL SCORE: completely in the Water Well target.

| 15 or 25 points |

**Attachment(s):**

**Setup Notes:**

**Programming:** (details on back)

**Run:**

**Name:**

---

**Mission 14: Water Well**
### Mission 15: Fire

<table>
<thead>
<tr>
<th>Mission</th>
<th>25 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make the fire drop only by making the Firetruck apply direct force to the House’s lever.</td>
<td></td>
</tr>
</tbody>
</table>

**Attachment(s):**

**Setup Notes:**

**Programming:** (details on back)

**Run:**

**Name:**
**Per-Mission Worksheets**

**Mission**

Move or catch Big Water and/or Rain water (one Rain maximum; no Dirty Water) so it is touching the mat in the Water Target, without the target ever reaching the white Off-Limits Line. Water may be touching the target, and/or other water, but not be touching nor guided by anything else. FOR BONUS: Score at least one Large Water in its target as described above WITH one on top, which is touching nothing but other water.

<table>
<thead>
<tr>
<th>10 /one Rain</th>
<th>+10 /each</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big</td>
<td></td>
</tr>
<tr>
<td>30 /Bonus points</td>
<td></td>
</tr>
</tbody>
</table>

**Attachment(s):**

**Setup Notes:**

**Programming:** (details on back)

**Run:**

**Name:**

**Mission 16: Water Collection**

![Image of water collection setup]
Mission

Move the Slingshot so it is completely in its target. FOR BONUS: Score Slingshot points as described above WITH the Dirty Water and a Rain completely in the Slingshot target.

20 + 15 points

Attachment(s):

Setup Notes:

Programming: (details on back)
Run:
Name:

Mission 17: Slingshot
## Mission 18: Faucet

### Mission

Make the water level obviously more blue than white as seen from above the cup, only by turning the Faucet handle.

### Points

25 points

### Attachment(s):

### Setup Notes:

### Programming:
(details on back)

Run:

Name: