PINNGUAQ

Lesson Plan

# ᐊᔾᔨᙳᐊᓕᐅᕈᑎᕋᓛᖅ ᑭᐸᓗᕐᑐᒡᒍᑕᐅᓪᓗᑎᑦ 3A: ᐊᑐᖅᑕᐅᓪᓗᐊᓲᑦ ᖃᕋᓴᐅᔭᒃᑯᑦ ᐊᒥᐊᓇᓗᓂ ᒍᕝᐱᒃᓴᐃᔪᑦ GraphicsGale

**Level:** Grade 4-6 • **Topic:** Art Design • **Subjects:** Arts, History, Heritage & Culture

## ᑎᑎᕋᖅᑎ

### ᐃᐊᓐ ᒪᑭᓖᓐ (Ian MacLean)

ᐃᐊᓐ ᒪᑭᓖᓐ ᐱᓕᕆᔨᒻᒪᕆᐅᕗᖅ ᐊᔾᔨᙳᐊᓕᐅᕈᑎᕋᓛᖅ ᑭᐸᓗᕐᑐᒡᒍᑕᐅᓪᓗᑎᑦ ᑕᒪᒃᑯᓂᖓ ᐋᖅᑭᒃᓱᐃᔨᒻᒪᕆᐅᕗᖅ/ᖃᕋᓴᐅᔭᒃᑯᑦ ᐊᔾᔨᙳᐊᑦ ᓈᑎᑕᐅᓲᖑᓂᖏᖕᓂᒃ ᑎᑎᖅᑐᒐᖅᑎᓗ ᐃᖅᑲᓇᐃᔾᔭᖃᖅᓯᒪᔪᑐᖃᖅ ᐱᙳᐊᖅᑐᓕᕆᕙᓂᖏᑦ ᖃᕋᓴᐅᔭᒃᑯᑦ 16 ᐊᕐᕌᒍᓕᖅᑐᓂᑦ. ᐊᓂᖅᓵᙱᑯᑖᑲᐃᓐᓇᕈᓐᓇᖅᑐᖅ 10 ᒥᓂᔅᓯᓂᒃ ᐊᑯᓂᐅᑎᒋᔪᖅ (ᓈᓴᐅᑎᓂᒃ ᓵᓚᒃᓴᒃᑲᓐᓂᕈᓐᓇᖅᑐᑎᑦ ᖃᐅᔨᒍᓐᓇᕈᕕᐅᒃ ᓱᑯᑦᑎᐊᓂ ᑕᒪᓐᓇ ᑐᑭᓯᒋᐊᕈᑎ ᐊᑐᕐᓂᕐᒪᖔᕐᒥᐅᒃ)!

## ᑐᑭᓯᒋᐊᙱᒐᕈᑎᖕᒋᑦ

ᖃᕋᓴᐅᔭᒃᑯᑦ ᑎᑎᖅᑐᒐᐅᔭᕈᑎ ᕿᒥᕐᕈᔭᐅᓂᖅᓴᐅᓲᖑᓪᓗᑎᑦ, ᐋᖅᑮᓗᓂ ᑐᑦᑕᕐᕕᐅᓪᓗᐊᕋᔭᖅᑐᒥᒃ ᐱᙳᐊᕐᕕᐅᒐᔭᖅᑐᑦ ᐃᓂᖏᑦ ᒪᕐᕈᐃᓕᖅᑲᖓᔪᕐᔫᔭᖅᑐᑦ ᐱᙳᐊᕈᑏᑦ ᐊᒻᒪᓗ ᖃᕋᓴᐅᔭᓕᕆᔾᔪᑎᓂᒃ, ᑖᒃᑯᐊ ᐊᒥᓱᒡᒍᑏᑦ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᓂᖏᑦ ᐱᙳᐊᕈᑎᒥ ᑐᙵᕕᖃᖅᑎᑎᓪᓚᑦᑖᖅᐳᑦ ᑖᒃᑯᐊ ᖃᕋᓴᐅᔭᒃᑯᑦ ᑎᑎᖅᑐᒐᐅᔭᕈᑎ ᐃᓂᒃᓴᖃᕐᑯᓪᓗᒋᑦ. ᐃᓗᓕᖃᓗᐊᖅᑐᑦ ᐊᒥᓲᓛᖑᓂᖏᖕᓂᒃ ᐱᙳᐊᕈᑎᑉ ᑎᑎᖅᑐᒐᐅᔭᒃᓯᒪᓂᖏᖕᓂᒃ. ᐊᒥᓱᒡᒍᑏᑦ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᓂᕆᒐᔭᖅᑕᖏᑦ ᐱᙳᐊᕈᑎᒥ Tilesets, ᓄᐊᑕᐅᓯᒪᔪᑦ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑦ ᐱᙳᐊᕈᑎᒥ ᐱᙳᐊᕈᑎᓕᕆᓂᕐᒥ, ᐋᖅᑭᒃᓱᐃᔨᓂᒃ ᓴᓇᑎᕐᑎᒍᓐᓇᕐᒪᑕ ᐊᖏᔪᒥᒃ ᐱᙳᐊᕐᕕᐅᖃᑦᑕᕋᔭᖅᑐᓂᒃ ᐃᓂᖏᖕᓂᒃ ᑕᐅᑐᒐᒃᓴᕐᑎᐊᕙᒡᒍᑕᐅᓪᓗᑎᑦ ᐊᒥᓱᓕᐅᕐᓗᓂ ᐊᒻᒪᓗ ᐃᓕᓯᓗᓂ ᐊᑐᐃᓐᓇᐅᒪᔪᓂᒃ ᓴᓇᔭᐅᓯᒪᔪᑦ ᐱᙳᐊᖅᑐᑦ ᐃᓂᒃᓴᕆᒐᔭᖅᑕᖏᑦ ᐱᙳᐊᕐᓗᓂ ᐱᙳᐊᕈᑎᒥ. ᐱᒋᐊᕐᓂᖏᑦ ᐊᒻᒪᓗ ᐃᓱᓕᓐᓂᖏᑦ ᑎᑎᖅᑐᒐᐅᔭᖅᑕᐅᔪᑦ ᐃᓂᒃᓴᖏᑕ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑦ ᐱᙳᐊᕈᑎᒥ ᐊᖅᑭᓱᖅᑕᐅᓯᒪᓂᖏᑦ, ᓴᓇᔭᐅᓲᑦ ᓇᓕᒧᑏᓕᖅᑎᑕᐅᓪᓗᑎᑦ ᐃᓱᖏᑦ ᑖᒃᑯᐊ ᐃᓂᒃᓴᖏᑕ

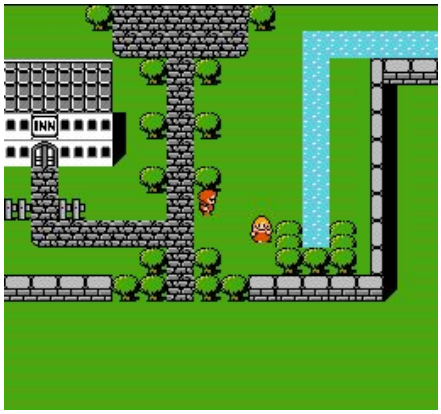
ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑦ ᐱᙳᐊᕈᑎᒥ, ᐋᖅᑭᒃᓱᐃᔨᒥᒃ ᐊᒥᐊᕆᑎᑦᑎᒍᓐᓇᖅᑐᑦ ᐊᖏᔫᑎᓪᓗᒋᑦ ᐊᔾᔨᐸᓗᖏᑦ ᐃᓂᒃᓴᖏᑕ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑦ ᐱᙳᐊᕈᑎᒥ ᐊᒻᒪᓗ ᐃᔨᖅᑕᐅᓗᑎᑦ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᐃᓕᔭᐅᔪᑦ ᐊᒻᒪᓗ ᐊᑐᓕᖅᑭᑦᑕᐅᓪᓗᑎᑦ ᓴᖅᑭᒃᓂᕋᔭᙳᐊᕐᓂᖃᕋᓱᒋᔭᑦ ᑭᐸᐹᕆᑦᑐᒡᒍᑕᓂᒃ ᐊᒥᐊᕆᓗᑎᑦ. ᐱᓪᓚᑦᑖᙳᐊᖑᔭᖅᑐᑦ 3D ᐱᙳᐊᕈᑏᑦ ᐊᑐᕋᔭᕐᒥᔪᑦ ᑕᐃᒪᓐᓇᐃᓕᐅᕐᓗᑎᑦ ᐊᒥᐊᕆᑎᐊᕐᓗᑎᑦ ᑲᑎᙵᑎᐊᕐᓂᖅᓴᐅᔫᔭᕐᓂᐊᕐᒪᑕ ᑎᑎᖅᑐᒐᐅᔭᖅᓱᒪᔪᑦ, ᐋᖅᑭᒃᓱᐃᓕᕐᓗᑎᑦ ᐃᓱᓕᑦᑕᕐᕕᖃᙱᑦᑐᓂᒃ, ᐃᓂᒃᓴᖏᑦ ᐃᓕᔭᐅᔪᓐᓇᕐᓗᑎᑦ ᐊᔾᔨᙳᐊᑦ ᑕᐃᒪᓐᓇᐃᓕᐅᖅᑎᓪᓗᑎᑦ ᐸᒻᒪᕆᐅᕗᖅ ᐊᑑᑎᖃᑦᑎᐊᖅᑐᓂ. ᑕᕝᕙᓂ ᐃᓕᓐᓂᐊᒐᒃᓴᒥ ᐃᓕᓐᓂᐊᖅᑏᑦ ᐃᓕᓐᓂᐊᕋᔭᖅᑐᑦ ᐋᖅᑭᒃᓱᐃᓗᑎᑦ ᐊᔾᔨᙳᐊᓕᐅᕈᑎᕋᓛᑦ ᑭᐸᐹᕆᑦᑐᒡᒍᑕᐅᔪᓂᒃ ᐊᒥᐊᕆᓗᑎᑦ ᐃᓕᓐᓂᐊᓚᐅᖅᑕᖏᑦ ᐃᓕᓐᓂᐊᒐᒃᓴᖅ 1 ᐊᒻᒪᓗ 2-ᒥ.

## ᖃᓄᐃᑦᑑᓂᖏᑦ

ᐅᕝᕙ ᐅᑯᐊ ᖃᑦᑏᓐᓇᐅᒐᓗᐊᑦ ᐆᑦᑑᑏᑦ ᐱᙳᐊᕐᑐᖃᖅᑎᓪᓗᒍ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑦ ᐃᓂᒃᓴᓕᐊᕆᔭᐅᓯᒪᔪᑦ ᐊᔾᔨᑏᙱᑦᑐᑎᒍᑦ ᑕᐅᑐᒐᒃᓴᐅᓪᓗᑎᑦ:

ᓴᓂᒧᑦ ᓴᖅᑭᖅᑎᑕᐅᕝᕙᓪᓕᐊᓂᖏᑦ:

ᕐᑯᓛᓂ–ᐊᒻᒧᑦ ᑕᑯᒃᓴᐅᓂᖏᑦ:



ᐱᖓᓱᐃᓕᖅᑲᖓᔫᔭᖅᑐᓂᒃ ᑕᑯᒃᓴᐅᑎᑦᑎᓗᓂ ᒪᕐᕈᐃᓕᖅᑲᖓᔫᔭᖅᑐᒃᑯᑦ ᑕᑯᒃᓴᐅᓂᐊᕐᒪᑕ:

ᐊᑐᓂ ᖁᓛᓃᑦᑐᑦ ᐆᑦᑑᑏᑦ ᑕᐃᑲᙵᖅᓚᒪᕗᑦ ᐱᓕᖅᑭᑦᑖᖅᑎᑕᐅᓪᓗᑎᑦ ᑕᐃᑲᓂᒃᓴᐃᓐᓇᖅ ᐱᙳᐊᖅᑕᐅᔪᑦ ᑭᙳᓕᕆᑦᑐᓂᒃ. ᓴᓂᒧᑦ ᓄᑕᐅᓗᑎᑦ ᐊᔾᔨᙳᐊᑦ ᑕᑯᓂᐊᖅᑕᐅᒍᓐᓇᕐᓂᖏᑦ ᐊᔾᔨᙳᐊᖏᑦ ᑕᑯᒃᓴᐅᑎᑦᑎᕗᑦ ᐊᔾᔨᓕᐅᖅᑕᐅᓯᒪᔪᓂᒃ ᑕᐃᑲᙵᑦ ᑯᓇᒥ ᑲᔅᓕᕙᓂᐊ Castlevania ᐱᙳᐊᒐᐃᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ ᑭᙳᓕᕆᓂᒃ, ᓯᕗᓪᓕᖅᐹᖅ 1986−ᙳᑎᓪᓗᒍ ᐱᙳᐊᒐᑦ ᓴᓇᔭᐅᓯᒪᔪᑦ, ᐊᒻᒪᓗ 2005-ᒥ ᓂᓐᑎᐊᓐᑐ DS ᓴᓇᔭᐅᓯᒪᓂᖏᑦ. ᖁᓈᓂ ᐊᒻᒧᑦ ᐊᔾᔨᙳᐊᖏᑦ ᑕᑯᒃᓴᐅᑎᑦᑎᕗᑦ ᓴᑯᐃᐅᕐᓵᓴᑦ ᑭᙳᓕᕆᖅᐹᒥ ᐊᑐᖅᑕᐅᔪᒪᔪᑦ ᐱᙳᐊᒐᖅ Final Fantasy ᐊᑐᕋᒃᓴᐅᔪᑦ NES (1987) ᐊᒻᒪᓗ ᑭᙳᓕᕆᖅᐹᒥ ᐊᑐᖅᑕᐅᔪᒪᔪᑦ III ᐱᙳᐊᒐᖅ Final Fantasy III SNES (1984-ᒥ). ᑭᙳᓕᕆᖅᐹᒥᓗ, ᐱᖓᓱᐃᓕᖅᑲᖓᔪᒥᔭᖅᑐᓂᒃ ᑕᑯᒃᓴᐅᑎᑦᑎᓗᓂ ᒪᕿᐃᓕᖅᑲᖓᔪᒥᔭᖅᑐᒃᑯᑦ ᑕᑯᒃᓴᐅᓂᐊᕐᒪᑕ ᐊᔾᔨᙳᐊᖏᑦ ᑕᐃᑲᙵᖓᔪᑦ ᑐᑭᓯᒋᐊᕈᑏᑦ ᑲᓇᓐᓇᕐᒥ ᓴᑐᕋᓐ SNES (1993)−ᒧᑦ ᐱᙳᐊᒐᕐᓄᑦ ᐊᒻᒪᓗ ᐊᔾᔨᙳᐊᖏᑦ ᕼᐃᐅᕐᕗᕋᐃᓐᑦ ᐊᔾᔨᙳᐊᖏᑦ ᐱᙳᐊᒐᒃᓴᒥ ᐅᑉᐱᕐᓂᓕᕆᓂᕐᒧᖓᙳᐊᖅᑐᑦ ᑭᙳᕚᖏᑦ ᓴᑐᕋᓐ ᐅᑎᖅᐳᖅ ᐊᑐᕋᒃᓴᐅᓪᓗᑎᑦ PC−ᒧᑦ (2013). ᐊᑐᓂ ᐊᔾᔨᙳᐊᖏᑦ ᑕᑯᒃᓴᐅᑎᑦᑎᕗᑦ ᑎᑎᖅᑐᒐᐅᔭᖅᓯᒪᔪᑦ ᓴᙱᓕᖅᐸᓪᓕᐊᓂᖏᑦ ᓇᓗᓇᐃᔭᖅᓯᒪᔪᓂᒃ ᑎᑎᖅᑐᒐᐅᔭᕕᖃᕈᓐᓇᕐᓗᑎᑦ, ᑕᑯᒥᓇᖅᑐᑯᓗᓪᓗᑎᑦ, ᑐᓄᐊ ᐊᔾᔨᙳᐊᖓ ᐊᑐᕐᕕᐅᔪᖅ ᐊᑐᓕᖅᑭᑦᑕᐅᓪᓗᑎᑦ ᐃᓗᓕᒃᓴᖏᖕᓂᒃ. ᐅᓪᓗᒥᐅᓂᖅᓴᑦ ᐱᙳᐊᕈᑏᑦ ᐊᑐᓱᑦ

ᐊᔾᔨᒌᙱᑦᑐᓂᒃ ᓴᓇᔭᐅᓯᒪᔪᓂᒃ, ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᐊᒥᓱᓕᐊᓇᔭᐅᓯᒪᔪᑦ ᐊᔾᔨᒌᙱᓐᓂᖃᒐᓚᒃᑎᑕᐅᓪᓗᑎᑦ, ᑕᑯᒃᓴᐅᓗᐊᕐᓂᖓᙱᒻᒪᑕ ᐊᑐᓕᖅᑭᑦᑕᐅᓯᒪᓂᖏᑦ.

## ᐃᓕᓐᓂᐊᖅᑕᐅᓇᓱᐊᕐᓂᖏᑦ

ᐃᓕᓐᓂᐊᖅᑏᑦ ᐃᓕᓐᓂᐊᕋᔭᖅᑐᑦ ᐊᐅᓚᓂᖏᖕᓂᒃ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᐊᒻᒪᓗ ᖃᓄᖅ ᓇᒻᒥᓂᖅ ᐋᖅᑭᒃᓱᐃᒍᓐᓇᕐᒪᖔᕐᒥᒃ. ᐱᕙᓪᓕᐊᒍᑎᖃᕐᓗᑎᑦ ᐅᐊᑦᑎᐊᕈ ᐃᓕᓐᓂᐊᒐᒃᓴᐅᖅᑲᐅᔪᓂᒃ ᓴᓇᒋᐊᓱᓂᐊᖅᑐᑦ ᐱᒻᒪᕆᐅᔪᓂᒃ ᐱᙳᐊᕈᑎᑉ ᑐᙵᕕᖏᑕ ᐃᓂᒃᓴᖏᖕᓂᒃ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ. ᐃᓕᓐᓂᐊᖅᑏᑦ ᐃᓕᓐᓂᐊᕋᔭᕐᒥᔪᑦ ᖃᓄᖅ ᑲᒪᔪᓐᓇᕐᒪᖔᕐᒥᒃ ᖁᓕᓈᑦᑐᓂᒃ ᐊᒻᒪᓗ ᓴᖅᑭᔭᖅᑎᑕᐅᓂᖏᖕᓂᒃ ᑕᐃᑲᓂᒃᓴᐃᓐᓇᖅ ᐊᔾᔨᙳᐊᕐᒥ ᓴᓇᔭᐅᓯᒪᔪᓂᒃ ᐊᑐᖅᑕᐅᓪᓗᓂ ᖃᕋᓴᐅᔭᓕᓇᔾᔪᑎ ᒍᕋᐱᒃᓴᐃᔪᓪ GraphicsGale.

## ᑕᐃᒎᓯᖏᑦ

- **ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑦ ᐱᙳᐊᕈᑎᒥ** – ᐊᔾᔨᙳᐊᖅ ᑎᑎᖅᑐᒐᐅᔭᖅᓯᒪᔪᑦ ᐃᓗᓕᒃᓴᖏᑦ ᖃᓄᐃᑦᑐᒡᒍᑕᐅᓪᓗᑎᑦ ᐊᑐᖅᑕᐅᓲᑦ ᓴᓇᔪᖃᖅᑎᓪᓗᒍ ᖃᓄᐃᑦᑐᙳᐊᖑᒐᔭᕐᒪᖔᕐᒥᒃ ᐃᓂᒃᓴᖏᑦ ᖃᕋᓴᐅᔭᒃᑯᑦ ᐱᙳᐊᕈᑎᓕᐅᕐᓗᓂ.
- **ᐊᒥᓱᒡᒍᑏᑦ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᓂᖏᑦ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᙳᐊᒃᓴᖏᑦ** – ᐊᒥᓱᒡᒍᑏᑦ ᐃᓂᒃᓴᖏᑦ ᐃᓗᓕᓖᑦ ᑕᒪᐃᓐᓂ ᖃᓄᐃᑦᑐᙳᐊᖑᓂᖏᖕᓂᒃ ᐃᓗᐊᓂ ᐱᙳᐊᕈᑎᒧᑦ ᐅᕝᕙᓘᓐᓂᑦ ᐱᙳᐊᒐᒃᓴᑉ ᐃᓚᖓᓂᒃ ᓱᓇᒃᑯᑖᙳᐊᒃᓴᖏᑦ.
- **ᐱᒋᐊᕐᓂᖏᑦ ᐊᒻᒪᓗ ᐃᓱᓕᓐᓂᖏᑦ ᑎᑎᖅᑐᒐᐅᔭᖅᑕᐅᔪᑉ ᐃᓂᒃᓴᖏᑕ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑦ ᐱᙳᐊᕈᑎᒥ ᐋᖅᑭᓱᖅᑕᐅᓂᖏᑦ** – ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ, ᐅᕝᕙᓘᓐᓂᑦ ᐊᒥᓱᒡᒍᑏᑦ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᓂᖏᑦ ᐱᙳᐊᕈᑎᒥ, ᐃᓕᔭᐅᓲᑦ ᐊᑭᐊᓄᑦ ᑕᑯᒐᒃᓴᐅᓂᖃᙱᓪᓗᑎᑦ ᓱᑯᑦᑎᐊᓄᑦ ᐃᓱᓕᓐᓂᖓᓂᒃ ᐊᒻᒪᓗ ᐱᒋᐊᕐᓂᖓᓂᒃ ᑎᑎᖅᑐᒐᐅᔭᖅᑕᐅᔫᑉ.
- **ᖃᓕᓈᓐᓂᖏᑦ** – ᑕᑯᒃᓴᐅᔪᖅ "ᖁᑦᑎᓐᓂᖓ" ᑎᑎᖅᑐᒐᐅᔭᖅᑕᐅᓯᒪᔪᑦ ᓇᑲᑎᓇᓂᕐᒧᑦ ᐸᐃᑉᐹᒃᑯᕕᖓ ᐃᓛᒃᑰᖓᔪᓂᒃ ᐊᔾᔨᙳᐊᕐᓂᒃ ᐅᕝᕙᓘᓐᓂᑦ ᐃᓗᓕᖏᖕᓂᒃ ᓴᓇᔭᐅᔪᓐᓇᕐᓂᐊᕐᒪᑕ ᐊᒻᒪᓗ ᐊᑐᖅᑕᐅᒍᓐᓇᕐᓗᑎᑦ ᐊᓯᔾᔨᖅᑕᐅᓗᑎᑦ ᑕᐃᑲᓂᒃᓴᐃᓐᓇᖅ ᑎᑎᖅᑐᒐᐅᔭᕐᕕᒻᒥ, ᐊᑦᑐᐃᓂᖃᙱᓪᓗᓂ ᐊᓯᖏᖕᓂᒃ ᐃᓗᓕᖏᖕᓂᒃ.
- **ᐱᙳᐊᕈᑎᒥ ᐃᓕᔭᐅᓯᒪᓂᖏᑦ ᐊᔾᔨᒌᙱᑦᑐᒡᒍᑏᑦ ᐃᓂᖏᑦ ᐊᒥᓱᓂᑦ ᐋᖅᑭᒃᓱᐃᑎᑦᑎᒍᓐᓇᐅᑎᖓ** – ᐊᔾᔨᒌᙱᑐᒡᒍᑏᑦ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᑕᐃᑲᓂ ᐊᒥᓱᒡᒍᑕᐅᔪᓂᒃ ᐃᓂᒃᓴᖏᖕᓂᒃ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᖕᓂᒃ ᐱᙳᐊᕈᑎᒥ ᐊᒥᓱᑎᒍᑦ ᐋᖅᑭᓱᖅᑕᐅᓯᒪᓂᖃᕈᓐᓇᖅᑐᑦ.

## ᑐᑭᒧᐊᕈᑏᑦ ᐊᐱᖅᑯᑕᐅᔪᑦ

1. ᑭᓱᒻᒪᑦ "ᐋᖅᑭᓱᖅᑕᐅᕐᓂᖏᑕ ᐃᓗᓕᖏᑦ"?
2. ᑭᓱᒻᒪᑕ ᐊᑐᖅᑕᐅᓪᓚᓇᓱᑦ ᐊᑐᖅᑕᐅᓕᖅᑐᑎᑦ ᐋᖅᑭᓱᖅᓯᒪᐅᕐᓂᖏᑕ ᐃᓗᓕᒃᓴᖏᖕᓄᑦ ᐊᑐᖅᑕᐅᒐᔭᖅᑐᑦ ᐱᙳᐊᕈᑎᓕᐅᕐᓗᓂ? (ᐆᑦᑑᑎᒋᓗᒋᑦ, ᐋᖅᑭᔅᓱᒐᑦ ᓚᐃᒍ, ᐋᖅᑭᒃᓱᒐᑦ ᐃᒡᓗᙳᐊᓕᐊᓇᔭᒃᓴᑦ, ᐋᖅᑭᓱᖅᑕᐅᓯᒪᒍᓐᓇᖅᑐᑦ, ᐊᖅᑯᑎᑯᑖᑦ/ᐊᖅᑯᑏᑦ ᓴᓇᒐᒃᓴᑦ, ᐊᓯᖏᓪᓗ)
3. ᐃᓚᖏᑦ ᑭᓱᕙᑦ ᐃᑲᔫᑕᐅᔪᓐᓇᖅᑐᑦ ᐋᖅᑭᓱᖅᑕᐅᓂᖏᑕ ᐃᓗᓕᒃᓴᖏᖕᓄᑦ ᐱᙳᐊᕈᑎᓕᐊᓇᔭᒃᓴᐅᒐᔭᖅᑐᑎᑦ?

### ᐃᓕᓐᓂᐊᕈᑎᒃᓴᓄᑦ ᑲᓱᖅᓯᒪᓂᖏᑦ

ᑖᓐᓇ ᐃᓕᓐᓂᐊᒐᒃᓴᖅ ᓇᓕᒧᓐᓂᖃᑦᑎᐊᕕᐅᑎᑉᐳᖅ ᓴᓇᙳᐊᕐᓂᕐᒧᑦ, ᖃᕋᓴᐅᔭᓕᕆᓂᕐᒧᑦ ᐊᒻᒪᓗ ᓱᓇᒃᑯᑖᓕᕆᓂᕐᒧᑦ ᐃᓕᓐᓂᐊᕈᑎᒃᓴᓂᒃ ᐃᓕᓐᓂᐊᖅᑕᐅᓗᑎᑦ ᓄᑖᕐᓂᒃ ᖃᕋᓴᐅᔭᓕᕆᔾᔪᑎᓄᑦ ᐊᒻᒪᓗ ᐋᖅᑭᒃᓱᐃᓗᓂ ᑎᑎᖅᑐᒐᐅᔭᖅᑕᐅᒍᓐᓇᖅᑐᑦ ᐱᙳᐊᕈᑎᒃᓴᑦ ᐃᓗᓕᖏᑦ.

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## ᓱᓇᒃᑯᑖᑦ

- ᒍᕝᐱᒃᓴᐃᔪᓪ GraphicsGale – ᖃᕋᓴᐅᔭᒃᑯᑦ ᐱᓗᒍ ᒍᕝᐱᒃᓴᐃᔪᓪ (ᑕᑯᓂᐊᕐᕕᐅᑉ ᐊᖅᑯᑎᖓ: https://graphicsgale.com/us/download.html)
- ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᑎᑎᕋᕋᒃᓴᑦ – ᖃᕋᓴᐅᔭᒃᑯᑦ ᐱᓗᒋᑦ ᐱᕐᑯᑎᖃᕐᕕᒻᒥ ᐸᐃᑉᐹᒃᑯᕕᒻᒥ (ᑕᑯᓂᐊᕐᕕᐅᑉ ᐊᖅᑯᑎᖓ: https://drive.google.com/file/d/1o_9PHhBmPtT-Xd41Jneky5Kt8siqsMlk/view)
- ᐊᓪᓕᕈᔭᒃ
- ᓂᐱᑎᒐᖅ ᐊᒻᒪᓗ ᑎᑎᕋᕋᐅᓯᒪᙱᑦᑐᖅ ᐸᐃᑉᐹᖅ ᐊᓕᓚᔪᖅ (ᐊᑐᖅᑕᐅᔪᒪᓐᓂᕈᑎᒃ)

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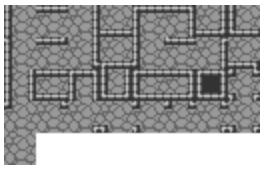
## ᖃᕋᓴᐅᔭᒃᑰᙱᑦᑐᖅ ᖃᓄᐃᓕᐅᕈᑎᒃᓴᑦ

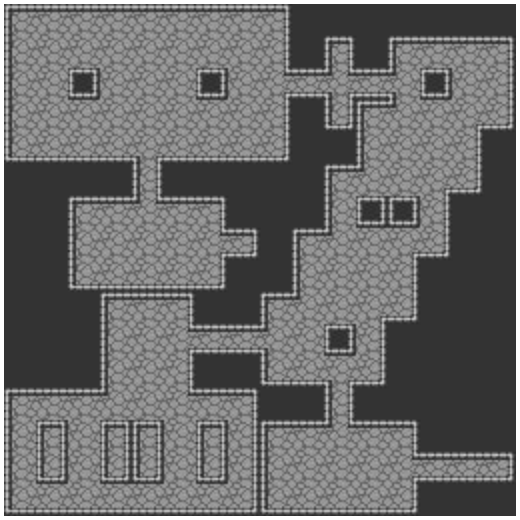
### ᐊᓪᓕᕈᔭᕐᓗᒋᑦ ᐃᓕᓗᒋᓪᓗ ᐆᒪᔪᙳᐊᖃᕐᕕᒃ

2D ᒪᕿᐃᓕᖅᑲᖓᙳᐊᖅᑐᑦ ᑕᑯᓗᒋᑦ ᐊᑐᓲᑦ ᐋᖅᑭᓱᖅᓯᒪᐅᕐᓂᖏᑦ ᐃᓂᒃᓴᓇᒐᔭᖅᑕᖏᑦ ᐱᙳᐊᕈᑎᒥ ᐊᔾᔨᒌᙱᑦᑐᑎᒍᑦ ᐊᒥᓱᒐᒍᑏᑦ ᐋᖅᑭᓱᖅᑕᐅᓗᑎᑦ ᑭᖑᓕᕇᓐᓂᖏᑎᒍᑦ ᓴᓇᓂᐊᕐᒪᑕ ᐊᒥᓱᒻᒪᓇᖕᓂᒃ ᐊᔾᔨᒌᙱᑦᑐᓂᒃ ᐊᕙᑎᓇᔭᐅᒐᔭᖅᑐᓂᒃ ᐱᙳᐊᕕᒃᓴᐅᓗᑎᑦ ᐱᙳᐊᕈᑎᒃᑯᑦ ᐊᑐᖅᓱᓐᓈᕐᓗᑎᓪᓗ ᑐᖓᓂᐅᙱᑦᑐᖅ ᐱᕐᑯᑎᓪᓚᑖᓂᒃ. ᐱᖃᓯᐅᑎᓯᒪᔪᑦ ᐃᑲᔫᑎᒃᓴᓂᒃ ᑕᕝᕙᓂ ᐃᓕᓐᓂᐊᕈᑎᒃᓴᒧᑦ ᑎᑎᕋᕋᒃᓴᐅᕗᑦ ᐸᐃᑉᐹᖅᑎᒍᑦ ᐱᔭᕆᐊᑭᑦᑐᑯᓗᐃᑦ ᐊᒥᓱᒐᒍᑏᑦ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᐃᓕᔭᐅᓯᒪᓂᒪᐊᖅᑐᑦ ᐆᒪᔪᖃᕐᕕᙳᐊᖅᓴᑉ ᓇᑎᒃᓴᖓᓂᒃ. ᑕᑯᒃᓴᐅᕐᑯᓪᓗᒋᑦ ᓱᖏᐅᑎᖓᒃᓴᑦ ᐊᒥᓱᓄᑦ ᖃᓄᐃᓕᐅᕈᑎᖏᔭᐅᓕᕐᓗᑎᑦ ᑕᐃᑲᓂ ᐊᒥᓱᒐᑎᓂᒃ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᓂᓇᖓᔭᖅᑕᖏᑦ ᐱᙳᐊᕈᑕᐅᓂᐊᖅᑐᒥᒃ, ᐊᓪᓕᕈᔭᕐᓗᒋᑦ ᐃᓂᒃᓴᓇᖓᔭᖅᑕᖏᑦ ᐃᓗᐊᓃᒃᑲᔭᖅᑐᑦ ᐱᙳᐊᕐᕕᒋᔭᐅᓂᐊᖅᑑᑉ ᐊᒻᒪᓗ ᐊᑐᕐᓗᒋᑦ ᐋᖅᑭᒃᓱᐃᓗᑎᑦ ᐱᔭᕆᐊᑭᑦᑐᒥᒃ ᐆᒪᔪᙳᐊᑦ ᓇᔪᖓᓇᖓᔭᖅᑕᖏᓂᒃ ᐱᙳᐊᕈᑎᑎᒍᑦ. ᓂᐱᑎᕐᓗᒋᑦ ᐸᐃᑉᐹᑦ ᓱᓇᒃᑯᑖᙳᐊᒃᓴᖏᑦ ᐸᐃᑉᐹᕐᒧᑦ ᐅᕝᕙᓗᓐᓃᑦ ᐋᖅᑭᒋᐊᑐᐃᓐᓇᕐᓗᒋᑦ ᓱᑯᑦᑎᐊᓃᒃᓴᓇᖓᔭᖅᑕᖏᑦ ᐃᓕᓗᒋᑦ ᑎᓯᔪᒧᑦ. ᑕᒪᐃᓐᓂᓕᒫᑦ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᖏᑦ ᐊᑐᖅᑕᐃᓐᓇᐅᔭᓇᐊᖃᙱᑦᑐᑦ. ᐃᓕᓐᓂᐊᖅᑏᑦ ᓴᓇᖃᑎᒌᑦᑐᑦ, ᑖᒃᑯᐊ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᙳᐊᒃᓴᖏᑦ ᑲᑎᑕᐅᔪᓐᓇᖅᑐᑦ ᐅᕝᕙᓗᓐᓃᑦ ᑕᐅᖅᓱᖅᑕᐅᓗᑎᑦ ᐋᖅᑭᒃᓱᐃᓂᐊᕐᒪᑕ ᐊᒥᓲᓂᖅᓴᓂᒃ ᐅᕝᕙᓗᓐᓃ ᐱᐅᓂᖅᓴᓂᒃ ᐃᓂᒃᓴᓇᖓᔭᖅᑕᖓᓂᒃ ᐊᕙᑎᖓᓂᒃ ᐱᙳᐊᕐᕕᐅᓂᐊᖅᑐᑉ. ᑭᒃᑯᓕᒫᑦ ᐱᔭᕇᓚᐅᖅᑎᓪᓗᒋᑦ ᐊᕙᑎᒃᓴᖓᓂᒃ ᐃᓂᒃᓴᓇᔭᐅᒐᔭᖅᑐᒥᒃ ᐆᒪᔪᙳᐊᕐᓄᑦ ᐱᙳᐊᒐᕐᒥ ᓱᓇᒃᑯᑖᒃᓴᖏᖕᓂᒃ, ᑲᑐᔾᔨᔭᓇᐊᓖᑦ ᑕᑯᒃᓴᐅᑎᑕᐅᓗᑎᓪᓗ ᖃᐅᔨᓂᐊᕐᒪᑕ ᓱᖏᐅᑎᑎᑕᐅᔪᓐᓇᕐᓂᖏᖕᓂᒃ ᐊᒥᓱᒐᒍᑏᑦ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᓂᒃᓴᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᙳᐊᒃᓴᖏᑦ.

ᐅᕝᕙ ᐅᑯᐊ ᐃᓂᒃᓴᙳᐊᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐅᙳᒥ:



ᐅᕝᕙ ᐆᑦᑑᑎᐅᔪᖅ ᖃᓄᖅ ᓴᓇᒍᓐᓇᕐᒪᖔᖅᐱᐅᒃ ᐊᑐᕐᓗᑎᑦ ᐋᖅᑭᒃᓱᐃᒍᑎᒃᓴᖏᖕᓂᒃ ᐊᕙᑎᒃᓴᖓᓂᒃ ᐱᙳᐊᕈᑎᑦ:



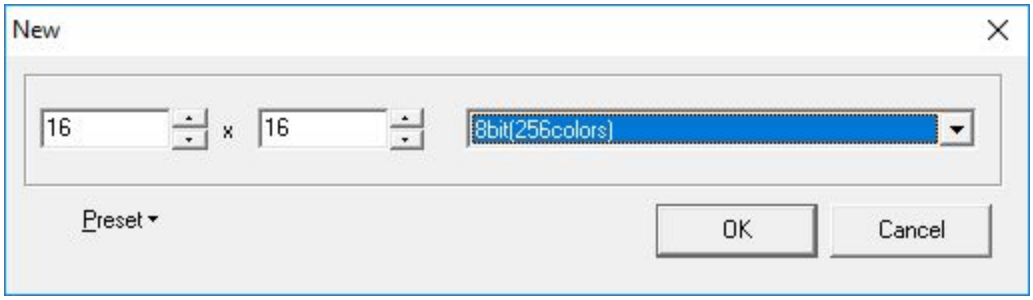
## ᖃᕋᓴᐅᔭᒃᑯᑦ ᖃᓄᐃᓕᐅᕈᑎᒋᔭᐅᔪᓐᓇᖅᑐᑦ

### ᐋᖅᑭᒃᓱᐃᓗᓂ ᐃᓂᒃᓴᖏᖕᓂᒃ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᙳᐊᒃᓴᖏᖕᓂᒃ

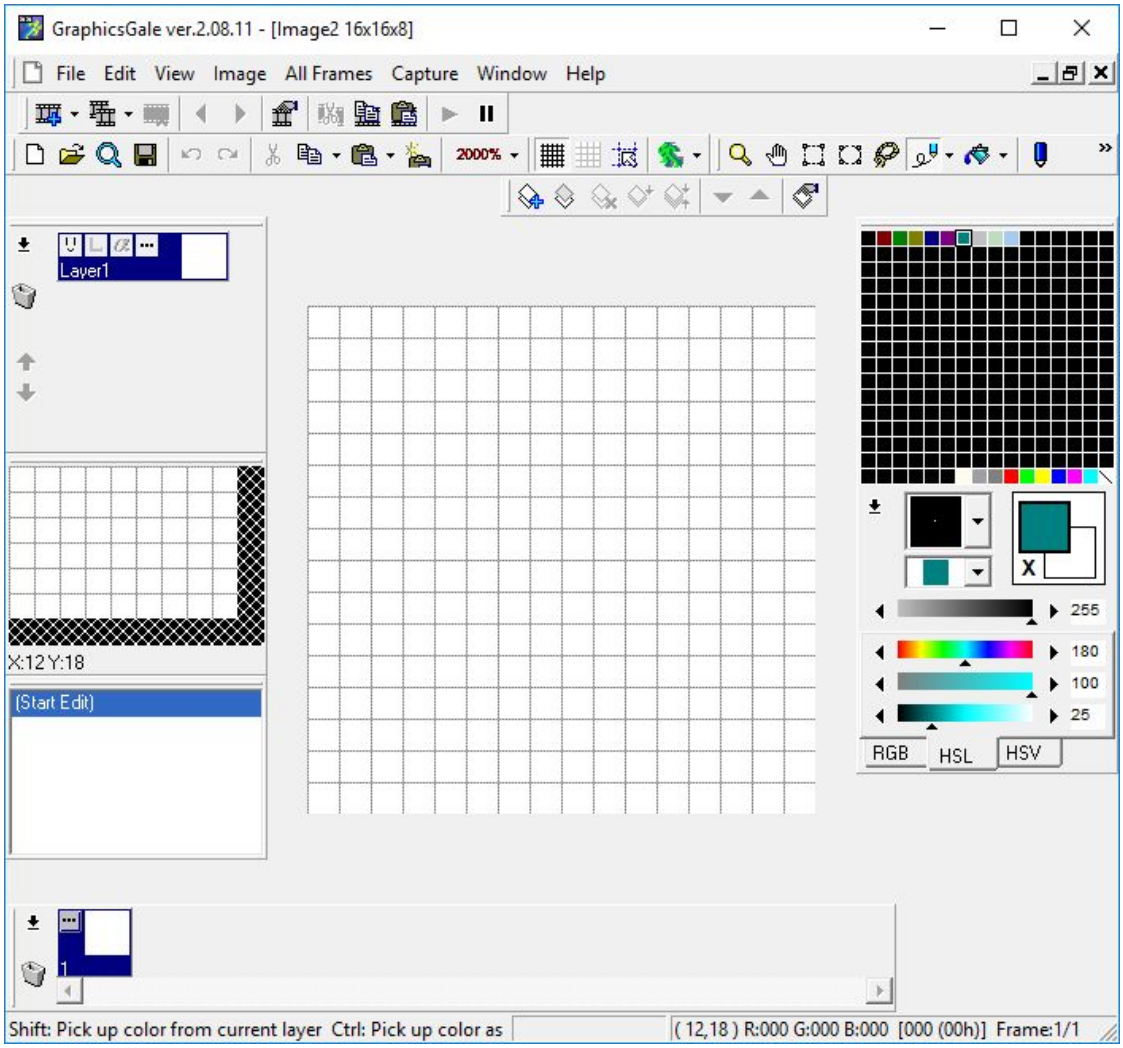
ᐊᑐᕐᓗᑎᑦ ᐃᓂᒃᓴᖏᖕᓂᒃ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᙳᐊᒃᓴᖏᖕᓂᒃ ᐊᑐᖅᑕᐅᓗᐊᓲᖕᖑᖅ ᓴᓇᓗᓂ ᐊᕙᑎᒃᓴᖏᖕᓂᒃ ᒪᕿᐃᓕᖅᑲᖓᙳᐊᖅᑑᔭᖅᑐᑦ ᑕᑯᓪᓗᒋᑦ 2D ᐱᙳᐊᕈᑎᒥ. ᐱᓕᕆᐊᖃᕐᓗᓂ ᖃᓄᐃᑦᑐᙳᐊᖑᒐᔭᖅᑐᑦ ᐆᒪᔪᙳᐊᑦ ᖃᕋᓴᐅᔭᒃᑯᑦ ᑎᑎᖅᑐᒐᐅᔭᕈᑎᒥ ᐊᑐᕐᓗᓂ ᑕᐃᑲᙳᑦ ᐃᓕᓐᓂᐊᕈᑎᒃᓴᐅᓚᐅᖅᑐᒥᒃ, ᐋᖅᑭᒃᓱᐃᓂᐊᖅᐳᒍᑦ ᐊᒥᓱᓂᑦ ᐃᓂᒃᓴᖏᖕᓂᒃ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᐊᕙᑎᖃᕐᓂᐊᕐᒪᑕ ᓴᓇᓗᒋᑦ ᐆᒪᔪᙳᐊᑦ ᖃᕋᓴᐅᔭᒃᑯᑦ ᑎᑎᖅᑐᒐᐅᔭᕈᑎᒍᑦ ᓴᓇᕙᐅᓯᒪᔪᓂᑦ ᓇᔪᒐᕆᒐᔭᖅᑕᖏᓐᓂᑦ. ᐱᒋᐊᕐᓂᐊᖅᐳᒍ ᓴᓇᓗᑕ ᐃᓛᒃᑰᖓᐅᖅᑐᓂᒃ ᐃᓂᒃᓴᙳᐊᕆᒐᔭᖅᑕᖏᖕᓂᒃ ᐆᒪᔪᙳᐊᑦ ᐱᙳᐊᕈᑎᑎᒍᑦ ᐊᑐᖅᑕᐅᒐᔭᖅᑐᓂᒃ.

ᐋᖅᑭᒃᓱᐃᓂᖅ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᒃᓴᖏᖕᓂᒃ

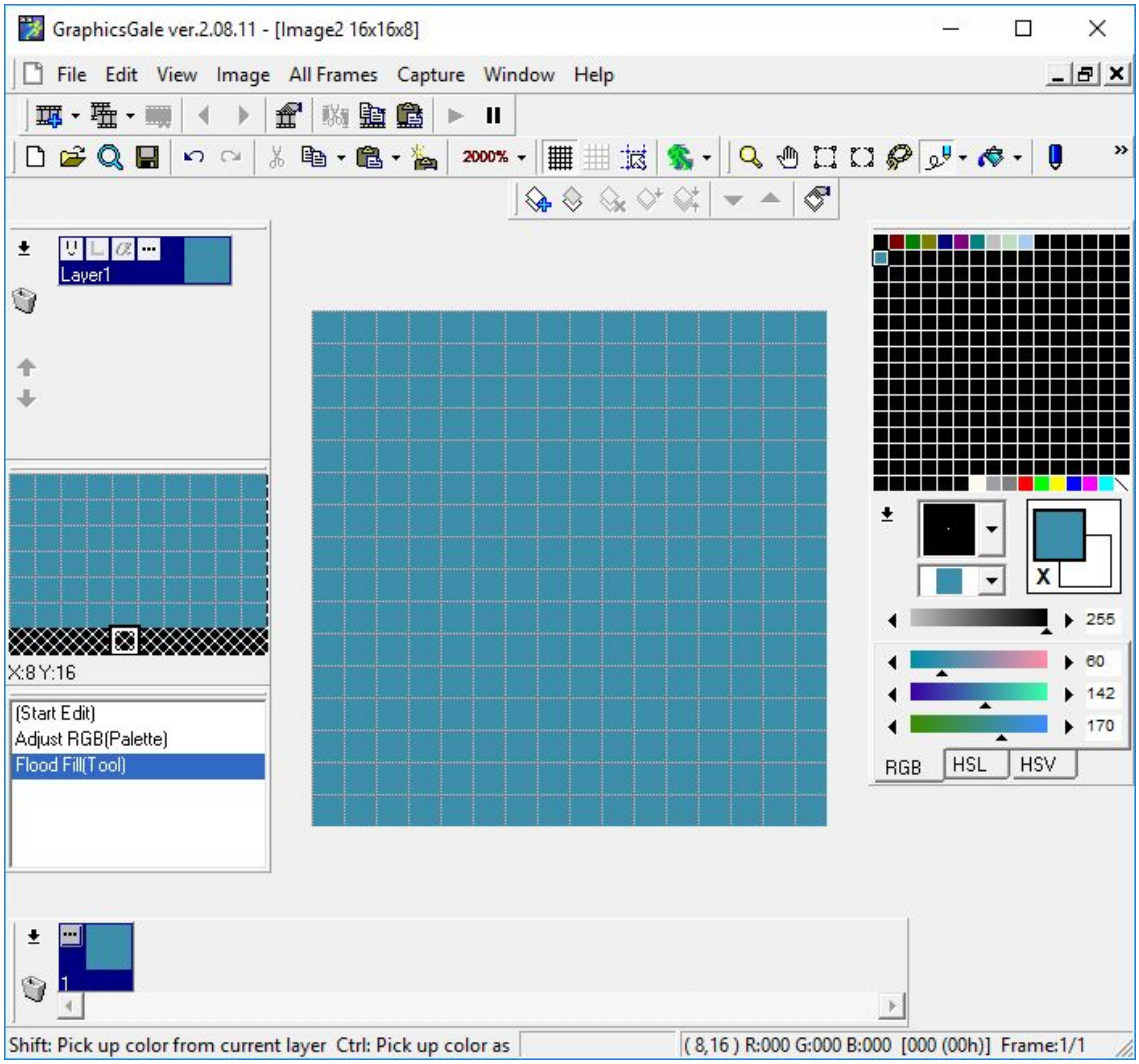
ᒪᑐᐃᖅᓯᓗᑎᑦ ᒍᕋᐱᒃᓴᐃᔪᓪᒥᒃ GraphicsGale ᐊᒻᒪᓗ ᐋᖅᑭᒃᓱᐃᓗᑎᑦ ᓄᑖᕐᒥᒃ ᐸᐃᐸᐋᒃᑯᕕᒃᓴᖓᓂᒃ (CTRL+N) ᐊᑐᕐᓗᑎᑦ 16x16 ᐊᖏᓂᓕᒃ ᑎᑎᖅᑐᒐᐅᔭᕐᕕᒃᓴᒥᒃ. ᐋᖅᑭᓪᓗᒍ ᐊᒥᐊᖏᑦ ᐃᒪᓐᓇ “8bit(256colours)”.



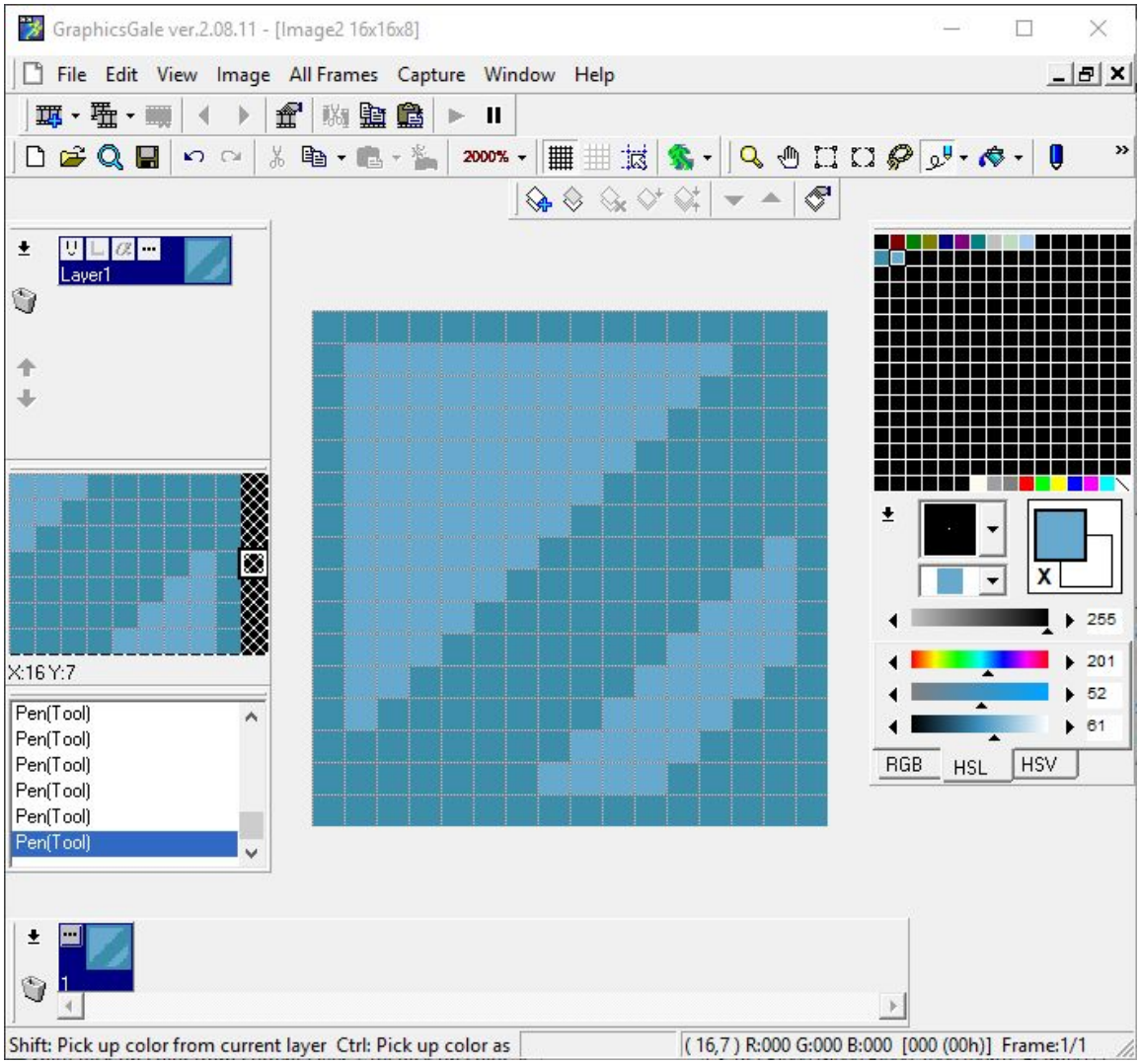

ᓇᕿᓪᓗᒍ ᐊᖏᔪᖅ ᑭᐸᐹᓇᑦᑐᖅ ᕐᑯᓛᓂ ᑕᓕᖅᐱᐊᑕ ᓄᑖᑉ ᑎᑎᕋᕐᕕᒃᓴᑉ ᐊᖏᓪᓕᒋᐊᕐᓂᐊᕐᒪᑦ ᐊᒻᒪᓗ ᐊᑐᕐᓗᑎᑦ ᐊᖏᓪᓕᑎᒋᐊᕈᑎ ᓇᕿᒐᒃᓴᖅ ᐊᖏᓪᓕᒋᐊᕈᑎᖓ ᑕᑯᒃᓴᐅᑎᑦᑎᓂᐊᕐᒪᑦ ᐊᒥᐊᕐᕕᖓᓂᒃ ᐅᕗᖓ 2000%. ᓇᕿᓪᓗᒍ ᑭᐸᐹᓇᑦᑐᒡᒍᑕᓄᑦ ᐊᑐᕋᒃᓴᖅ ᓇᓗᓇᐃᒃᑯᑕᖓ ᑕᐃᑲᓂ ᐊᑐᕋᒃᓴᑦ ᓇᓗᓇᐃᒃᑯᑕᓖᑦ ᐃᓂᖃᕐᕕᖓᓂ ᐊᓯᔾᔨᖅᑕᕐᑯᓪᓗᒋᑦ ᐊᔾᔨᒌᙱᑦᑐᑦ ᐊᑐᕋᒃᓴᐅᔪᑦ ᑭᐸᐹᓇᑦᑐᒡᒍᑎᓖᑦ ᓴᖅᑭᖅᑎᕐᑯᓪᓗᒋᑦ ᖃᒥᕐᑯᓪᓗᒋᓪᓗ.



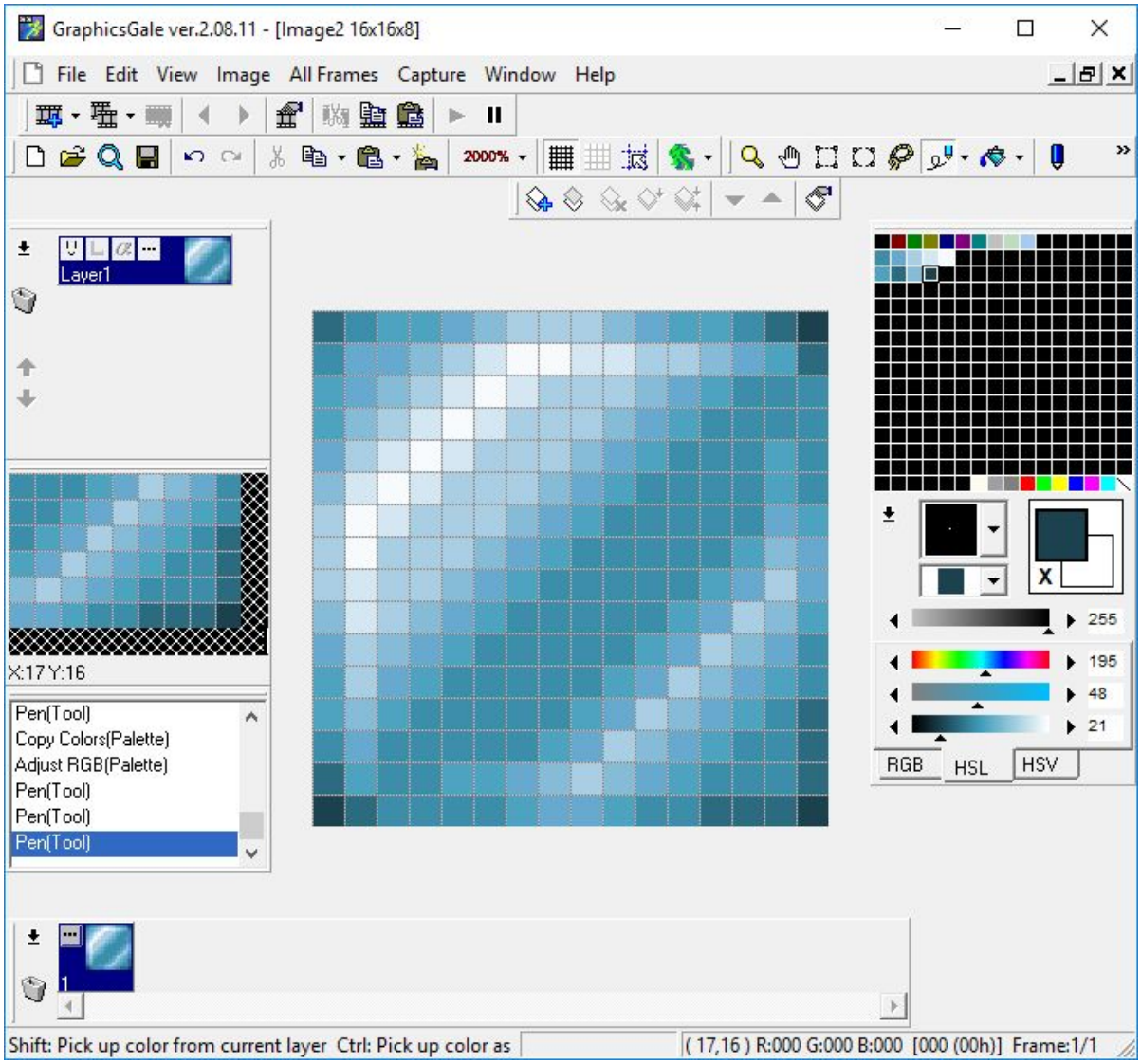

ᐅᓪᓗᒥᐅᔪᖅ, ᖃᑦᑏᓐᓇᐅᓗᐊᕐᒪᑕ ᐊᒥᐊᕈᑎᒃᑯᕕᑦ ᐊᒥᐊᖏᑦ ᑕᓕᖅᐱᐊᓃᑦᑐᑦ. ᕿᕐᓂᖅᑕᑦ ᑭᐸᐊᓇᑦᑐᑦ ᐅᓪᓗᒥᐅᔪᖅ ᓱᑯᑦᑎᐊᓃᑎᑕᐅᓂᐊᕐᓂᖏᑦ ᐃᓕᔭᐅᓯᒪᙱᑲᓚᐅᕐᒪᑕ ᐃᓚᓯᒍᓐᓇᕐᓗᑕ ᐊᒥᐊᑦᑎᓐᓂᒃ. ᓇᕿᓪᓗᒋᑦ ᐊᒥᐊᖏᑦ ᐊᒻᒪᓗ ᐊᑐᕐᓗᒍ RGB/HSL/HSV ᐊᓪᓕᕐᒥ ᐊᑐᕋᒃᓴᐅᔪᑦ ᐊᒥᐊᓇᕕᒃᓴᑦ ᐊᓪᓕᕐᒥ ᐋᖅᑭᕐᑯᓪᓗᒍ ᐊᒥᐊᓇᓂᐊᖅᑕᖓ ᐃᓂᒃᓴᓕᐅᕈᑎᒋᓂᐊᖅᑕᕕᑦ ᐊᕙᑎᖓᑕ ᐱᙳᐊᕈᑎᒥ. ᐃᓱᒪᓗᑎᑦ ᐊᒥᐊᑉ ᑕᑯᒃᓴᐅᓛᖑᒐᕐᓂᖓ ᐃᓂᒃᓴᖃᕐᕕᙳᐊᖓ ᐊᑐᕈᒪᒐᕐᖅᑕᐃᑦ ᓴᓇᓗᒍ ᐊᒻᒪᓗ ᐆᑦᑐᕋᕐᓗᒋᑦ ᖃᓄᐃᑦᑑᓂᐊᓕᕐᓂᖏᑕ ᐊᕙᑎᖏᑦ ᐊᒥᐊᑉ ᓈᒻᒪᒋᓕᕐᓗᒍ. ᐊᒥᐊᑉ ᓂᕈᐊᓚᐅᖅᑎᓪᓗᒍ, ᓂᕈᐊᕐᓗᒍᓗ ᐃᓗᓪᓕᓇᐊᓕᒻᒥᒃ ᓇᓗᓇᐃᒃᑯᑕᖅ ᑕᐃᑲᙱᑦ ᓂᕈᐊᒐᒃᓴᐅᔪᓂᒃ ᐊᒻᒪᓗ ᓇᕿᓪᓗᒍ ᓱᑯᑦᑎᐊᓈᕈᒪᒻᒪᖔᖅᐱᐅᒃ ᐊᒥᐊᓇᓂᐊᖅᑕᖕᓄᑦ ᑎᑎᖅᑐᒐᐅᔭᕐᕕᒋᓗᒍ. ᑕᒪᓐᓇ ᐃᒪᐃᒐᔭᖅᑐᖅ ᐊᒥᐊᓇᕕᒻᒧᑦ ᓄᑖᕐᒥᒃ ᐊᒥᐊᕐᒥᒃ ᐊᑐᕐᓗᓂ.




ᐊᑐᕐᓂᐊᓕᕐᒥᔪᒍᑦ ᐊᒥᐊᕐᒥᒃ ᓂᕈᐊᕋᑖᖅᑕᖕᓂᑦ ᑐᙵᕕᒋᓗᒍ ᐱᐅᔫᓂᖓ ᐊᒥᐊᑦᑎᐊᕈᑏᑦ ᐊᔾᔨᒌᙱᑦᑐᓂᒃ ᐊᒥᐊᕐᓂᒃ ᓴᖅᑭᑦᑐᖃᓕᕐᑯᓪᓗᒍ. ᓇᕿᓪᓗᒍ CTRL+left-click ᐊᒥᐊᕈᑎᑉ ᑭᐸᓛᓐᑐᖏᖕᓂᒃ ᐊᒻᒪᓗ ᓈᑦᓗᒍ ᓄᑖᕐᒧᑦ ᐃᓗᓕᖃᙱᑦᑐᒧᑦ. ᐊᒥᓱᓕᐅᕐᓗᒍ ᑕᒪᓐᓇ ᑕᐃᒪᓐᓇᐃᓕᐅᖅᑎᓪᓗᑎᑦ ᓱᑲᓐᓂᖅᓴᐅᕗᖅ ᐃᖅᑲᐅᒪᒐᓱᐊᕐᓗᑎᑦ ᖃᓄᑦᑐᒥᒃ ᐊᒥᐊᕐᒥᒃ ᓂᕈᐊᖅᑲᐅᒻᒪᖔᖅᐱᑦ ᐊᒻᒪᓗ ᓇᕿᒃᑲᓐᓂᕐᓗᑎᑦ RGB ᐱᐅᔫᓂᖓᓂᒃ. ᓇᕿᓪᓗᒍ ᐊᒥᓱᓕᐅᕈᓐᓇᐅᑎ ᐊᒻᒪᓗ ᐋᖅᑭᑎᐊᕐᓗᒍ. ᐊᑐᕐᓗᑎᑦ HSL ᓇᕿᑎᖓᖓ ᐋᖅᑭᑎᐊᕐᑯᓪᓗᒍ ᖃᐅᒪᔨᓂᖓ ᓂᕈᐊᒐᒃᓴᖅ ᖃᐅᒻᒪᑎᕐᔫᒥᓗᒍ ᒪᓕᓪᓗᒍ ᐊᒥᐊᑦ ᐊᑐᕐᓂᐊᖅᑕᐃᓐᑦ ᐊᑐᕐᓗᑎᑦ ᑎᑎᕋᐅᑎᒥᒃ, ᐊᒻᒪᓗ ᐊᑐᓕᕐᓗᒍ ᑖᓐᓇ ᖃᐅᒪᓂᖅᓴᖅ ᐊᒥᐊᑉ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙵᐊᕈᑎᒥ.




ᐃᓚᓯᖃᑦᑕᐃᓐᓇᕐᓗᑎᑦ ᐊᒥᐊᕐᓂᒃ, ᖃᐅᒪᓂᖅᓴᐃᓗᑎᑦ ᐊᒻᒪᓗ ᑖᓂᑭᑦᑑᓂᖅᓴᐅᓗᑎᑦ, ᓈᒻᒪᒋᓕᕋᓱᐊᕐᓂᕐᓂ.

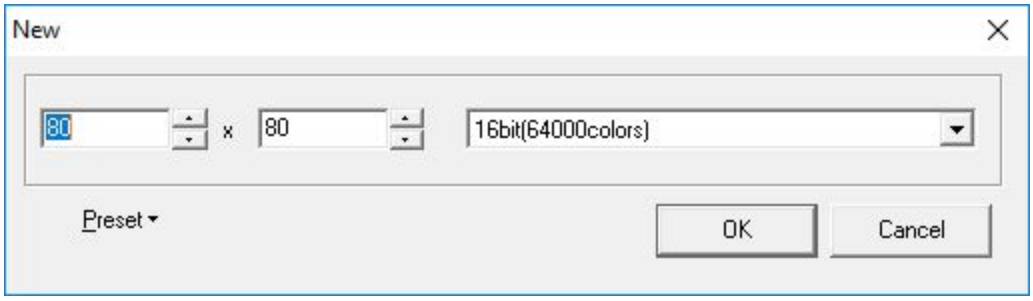



ᑐᖅᑯᕐᓗᒋᑦ ᐱᔭᕇᖅᓯᒪᔭᑎᑦ ᐸᐃᑉᐹᒃᑯᕕᒻᒧᑦ ᐅᕗᙵᕐᓗᒋᑦ ᐸᐃᑉᐹᒃᑯᕕᒃ/ᑐᖅᑯᕐᓗᒍ File/Save As. ᓂᕈᐊᕋᒃᓴᑦ ᑭᐸᐊᕐᑐᓃᑦᑐᑦ ᒪᑐᐃᖅᑎᓪᓗᒍ, ᐋᖅᑭᓪᓗᒍ ᓱᑯᑦᑎᐊᓄᕈᒪᒻᒪᖕᒑᖅᐱᐅᒃ ᐸᐃᑉᐹᓕᐊᕆᓯᒪᔭᐃᑦ, ᓇᕿᓪᓗᒍ ᐊᑎᖓ, ᐊᒻᒪᓗ ᓂᕈᐊᕐᓗᒍ PNG ᑕᐃᑲᓂ “ᑐᖅᑯᕐᓗᒍ ᖃᓄᐃᑦᑑᓂᖓ:” “Save as type:” ᓂᕈᐊᕋᒃᓴᐅᔪᓂᒃ ᖃᓄᐃᓕᐅᕈᑎᖃᕐᓗᓂ ᖃᕋᓴᐅᔭᒃᑯᑦ ᐊᒻᒧᐊᑦᑎᓪᓗᒍ ᓴᖅᑭᑲᓐᓂᓲᑦ. ᓇᕿᓕᕐᒥᓗᒍ ᑐᖅᑯᕐᓗᒍ Save.

ᑕᐃᒪᓐᓇᐃᓕᐅᒃᑲᓐᓂᕐᓗᑎᑦ, ᐊᒥᓱᓂᑦ ᐃᓂᒃᓴᖕᒋᖕᓂᒃ ᐱᙵᐊᕈᑕᐅᓂᐊᖅᑑᑉ ᓴᓇᑏᕋᓱᐊᕐᓂᕐᓂ ᐊᑐᕈᓐᓇᑕᕐᓂᒃ ᐱᐅᔪᒥᒃ ᐊᑦᑎᓂᖅᓴᒥᒃ ᖁᑦᑎᓐᓂᖃᕐᓗᓂ ᐆᒪᔪᙵᐊᕆᓂᐊᖅᑕᐃᑦ. ᐃᖅᑲᓇᐃᔮᖃᓕᕐᓂᐊᓕᕐᒥᔪᒍᑦ ᓄᑖᕐᒥᒃ ᐸᐃᑉᐹᒃᑯᕕᒻᒥᒃ, ᐊᒻᒪᓗ ᑕᐃᑯᙵᖃᖃᕐᓗᑎᑦ ᐃᓂᒃᓴᖕᒋᑦ ᐱᙵᐊᕐᕕᐅᓂᐊᖅᑑᑉ ᓴᓇᓂᐊᕋᕕᑦ ᖃᓄᐃᑦᑐᒥᒃ ᐊᑐᕋᔭᕐᒪᖕᒑᕐᒥᒃ ᐱᙵᐊᕈᑎᒋᔭᐅᓂᐊᖅᑐᖅ.

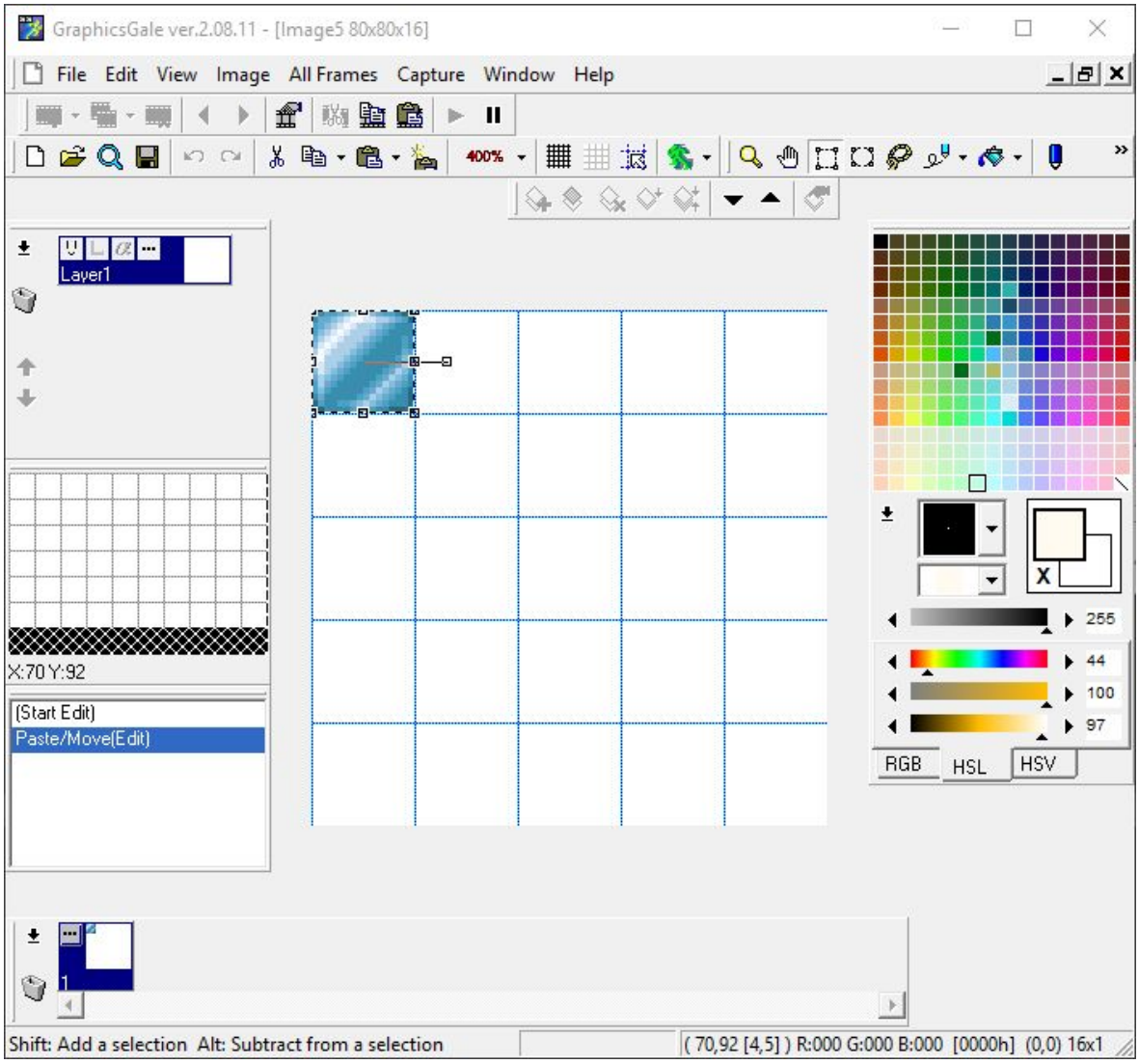
ᓴᓇᓗᑎᑦ ᓄᑖᕐᒥᒃ ᐸᐃᑉᐹᒃᑯᕕᒻᒥᒃ (CTRL+N), ᐋᖅᑭᓪᓗᒍ ᐊᖏᓂᖓ ᐅᕗᖓ 80x80px, ᐊᒻᒪᓗ ᐊᒥᐊᖓ ᐃᒪᓐᓇᐃᑦᑐᕈᖅᑎᓪᓗᒍ “16bit(64000colors)”. ᐊᑐᕐᓗᑎᑦ 8-ᖑᔪᓂᒃ ᐊᒥᐊᓕᖕᓂᒃ ᐊᑐᖅᑕᐅᔭᕗᑦ ᒥᑭᓂᖅᓴᐅᒻᒪᑕ ᐊᒻᒪᓗ ᐱᔭᕇᐊᑭᓐᓂᖅᓴᐅᓪᓗᑎᑦ ᐊᑐᕐᓗᑎᑦ, ᑭᓯᐊᓂᓕ ᑕᐃᒃᑯᐊ ᐊᒥᐊᑦ ᐊᑐᖅᑕᒥᓂᖅᑎᑦ

ᓇᓗᓇᐃᒃᑯᓯᖅᑕᐅᓂᐊᖅᑐᑦ, ᐊᒻᒪᓗ ᐊᒥᐊᖏᑕ ᑐᑭᓯᒋᐊᕈᑎᖏᑦ ᓱᑯᑦᑎᐊᓃᓐᓂᖏᓪᓗ ᐊᒥᐊᕈᑎᖃᕐᕕᒻᒥ ᐃᓚᒋᔭᐅᓕᕐᓂᐊᖅᑐᑦ ᐸᐃᑉᐹᒃᑯᕕᒻᒧᑦ. ᐊᓯᐊᓅᒃᑲᓐᓂᕐᓂᕈᑦᑎᒍᑦ 9–ᖑᔪᓂᑦ ᐊᒥᐊᕈᑎᖃᕐᕕᒻᒥ, ᐊᒥᐊᖏᑦ ᓂᕈᐊᖅᑕᕗᑦ ᐊᓯᔾᔨᕐᓂᐊᖅᑐᑦ ᐃᓚᔭᐅᓂᐊᕐᒪᑕ ᐅᓪᓗᒥᐅᔪᖅ ᐊᒥᐊᕈᑎᑦᑎᓐᓄᑦ, ᐊᒻᒪᓗ ᓴᖅᑭᕋᔭᙱᑦᑐᑎᑦ ᐊᑑᑎᒋᓇᓱᐊᖅᑕᑎᓐᓂᒃ.

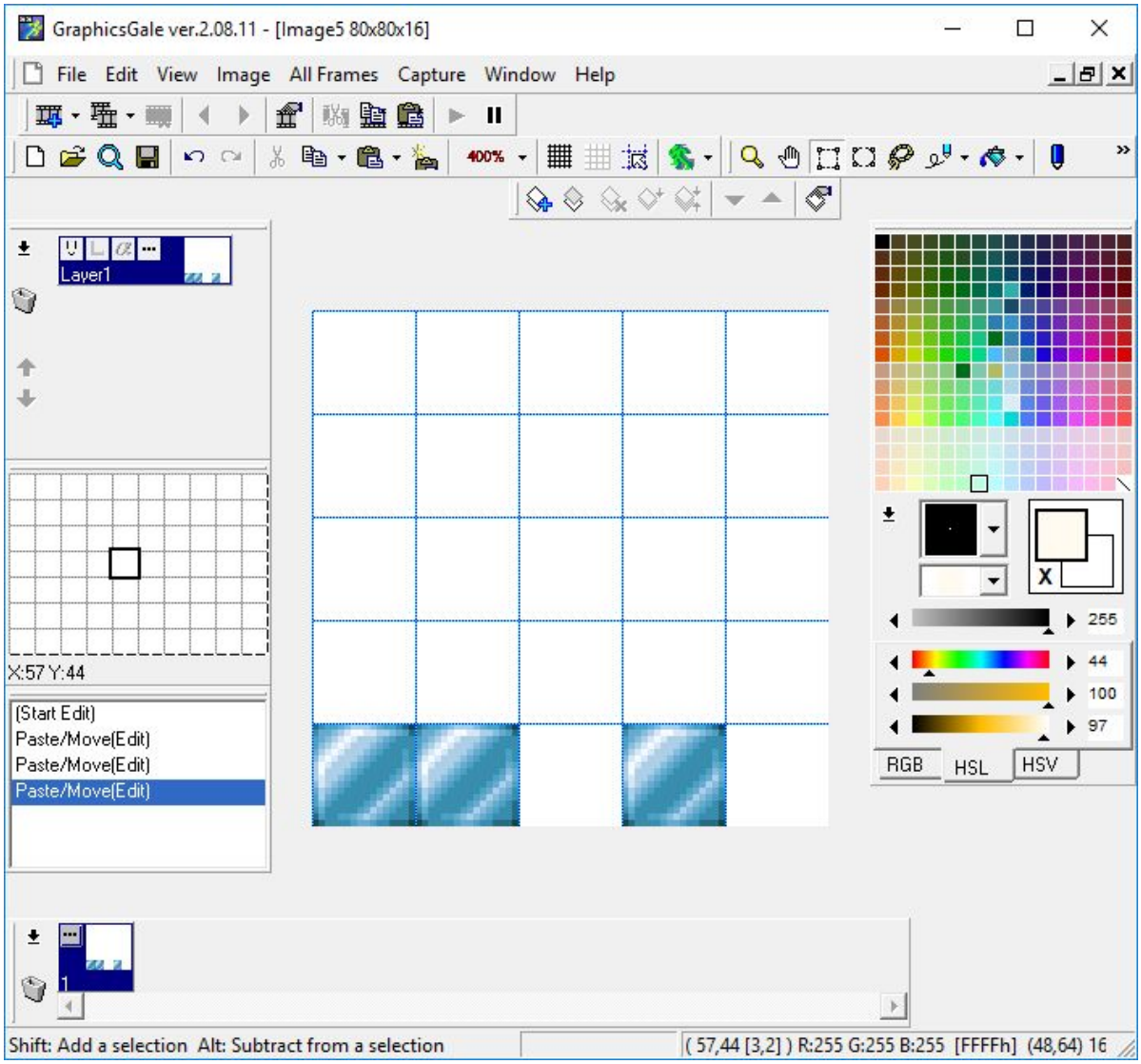



ᒥᑭᓪᓕᑎᒋᐊᕐᓗᒍ ᑕᑯᒃᓴᐅᔾᔪᑎᖓ ᐊᒻᒪᓗ ᐋᖅᑭᓪᓗᒍ ᐊᖏᓪᓕᒋᐊᕈᑎᖓ ᑕᑯᒃᓴᐅᓂᐊᖅᑐᖅ ᐊᒥᐊᓇᓂᐊᖅᑕᐃᑦ

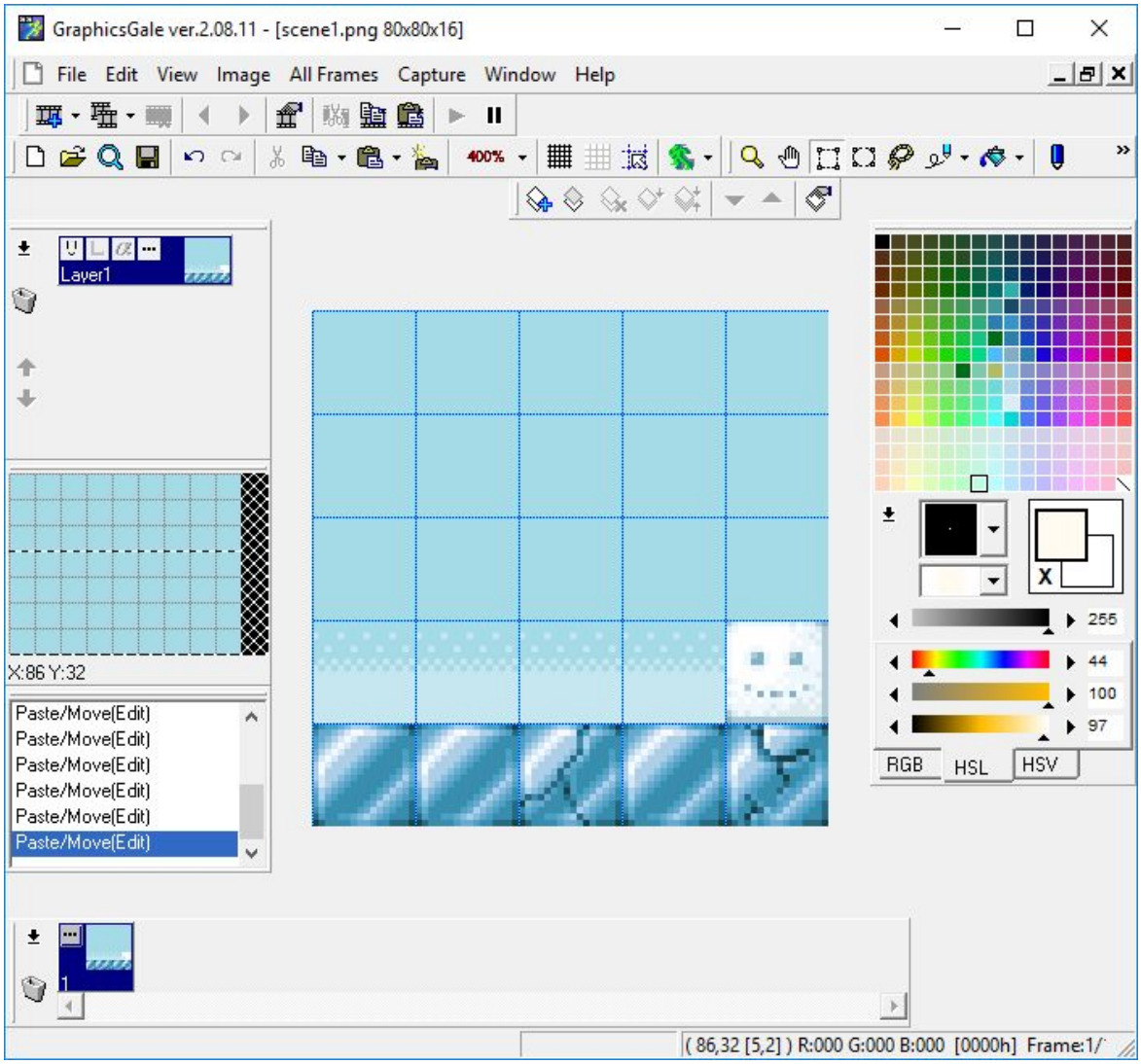
ᐃᒪᓐᓇᒧᑦ 400%. ᒫᓐᓇᓕ ᑕᐃᒪ ᐊᑐᕐᓂᐊᓕᕐᒥᔪᒍᑦ ᓄᑖᕐᒥᒃ ᑭᐸᓗᓐᑐᕋᓛᓕᓐᓂᒃ ᑎᑎᖅᑐᒐᐅᔭᕐᕕᒃᓴᒥᒃ. ᓇᓗᓇᐃᒃᑯᑕᖓ ᓴᓂᐊᓃᑦᑐᖅ ᑭᐸᓗᓐᑐᕋᓛᓖᑦ ᐊᑐᕋᒃᓴᒥ ᑕᐃᑲᓂ ᓂᕈᐊᕋᒃᓴᖃᕐᕕᐅᔪᓂᒃ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᓂᑦ. ᓇᕿᓪᓗᒍ ᐊᒻᒪᓗ ᓂᕈᐊᕐᓗᒍ ᐅᓇ ᐊᖏᓂᖓ 16x16 ᑕᐃᑲᓂ ᑭᐸᓗᓐᑐᑉ ᐃᓗᐊᓂ ᓂᕈᐊᕋᒃᓴᐅᔪᑦ ᓴᖅᑭᓲᓂ. ᑕᒪᓐᓇ ᐋᖅᑮᓂᐊᖅᑐᑦ ᓇᓕᐊᓐᓃᓕᕐᓂᖏᖅᓂᒃ ᑭᐸᓗᓐᑐᕋᓛᑦ ᓇᓕᒧᑏᓕᖅᑎᒐᒃᓴᐅᑦᑎᐊᕐᓂᐊᕐᒪᑕ ᐊᖏᓂᖓᓄᑦ ᐊᑐᖅᑕᑎᓐᓄᑦ 16x16px ᐃᓂᒃᓴᓇᔭᐅᓂᐊᖅᑐᑦ ᐱᖑᐊᕈᑎᓕᐊᕐᒥ. ᓄᓪᓗᒋᑦ ᐃᓂᒃᓴᓕᐊᓇᓯᒪᔭᑎᑦ ᐅᕗᖓᕐᓗᑎᑦ Edit>Import. ᓂᕈᐊᕐᓗᒍ ᐊᑕᐅᓯᖅ ᐃᓂᒃᓴᓇᔭᐅᖑᐊᕐᓂᐊᖅᑐᑦ ᖃᓄᐃᑑᓂᒃᓴᖓ ᐱᖑᐊᕈᑎᒥ ᐊᒻᒪᓗ ᓇᕿᒻᒥᓗᒍ “ᒪᑐᐃᕐᓗᒍ” “Open”.




ᓄᓪᓗᒍ ᖃᕋᓴᐅᔭᒃᑯᑦ ᑎᒃᑯᐊᖅᑕᕈᑎᖓ ᑕᐃᑲᓄ ᓱᓇᒃᑯᑖᖕᒍᐊᕐᒧᑦ ᐃᓂᖃᕐᓂᐊᖅᑐᒧᑦ ᐱᖕᒍᐊᕈᑎᒥ ᐊᓯᔾᔨᕋᓱᐊᕐᓂᖓᓂ ᑎᓴᒪᐃᓕᖅᑲᖓᔪᖅ ᑎᒃᑯᐊᖅᑕᕈᑎᖓ. ᑖᓐᓇ ᓄᑦᑎᑦᑎᒍᑎᐅᕗᖅ ᓇᓗᓇᐃᒃᑯᑕᓕᒃ. ᓴᐅᒥᐊᓃᑦᑐᖅ ᓇᕿᓪᓗᒍ Left-click ᐊᒻᒪᓗ ᓄᓪᓗᒍ ᓱᓇᒃᑯᑖᖕᒍᐊᒃᓴᖅ ᐃᓚᖓᓄᑦ ᑭᐸᓗᕆᑦᑐᓄᑦ. ᑕᓕᖅᐱᐊ ᓇᕿᓪᓗᒍ ᓇᒧᑐᐃᓐᓇᖅ ᑕᐃᕙᖕᒑᕐᓗᓂ ᓱᓇᒃᑯᑖᖕᒍᐊᕐᓂᒃ ᐋᖅᑭᑦᑕᐅᓂᐊᕐᒪᑦ ᐊᒻᒪᓗ ᓂᕈᐊᖅᑕᐅᓯᒪᒍᓐᓃᕐᓂᐊᕐᒪᑦ. ᓄᒋᐊᕈᑎᖓ ᖃᕋᐅᓴᔭᒃᑯᑦ ᑎᒃᑯᐊᖅᑕᕈᑎ ᐊᓯᔾᔨᓕᕋᔭᖅᑐᖅ ᓄᒐᒃᓴᐅᓕᕐᓗᓂ. ᓂᕈᐊᒃᑲᓐᓂᕐᑯᓪᓗᒍ ᐃᓂᒃᓴᖓ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖕᒋᑦ ᐱᖕᒍᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᑦ, ᓄᓪᓗᒍ ᓇᕿᑎᔾᔪᑎ ᑕᑯᒃᓴᐅᔪᖅ ᓱᑯᑦᑎᐊᓄᕋᒃᓴᕈᑎᖕᒋᑦ ᑎᓇᖅᑯᐊᓄᑦ, ᓴᐅᒥᐊᓐᓇᕿᓪᓗᒍ Left-click, ᐊᒻᒪᓗ ᑭᐸᓗᕆᑦᑐᑦ ᓂᕈᐊᖅᓯᒪᔭᑎᑦ ᓄᓪᓗᒋᑦ. ᓄᒃᑲᓐᓂᓕᕐᒥᓗᒍ ᐃᓂᒃᓴᖓ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖕᒋᑦ ᐱᖕᒍᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᖕᒋᑦ ᓂᕈᐊᖅᑕᐅᓯᒪᒍᓂ, ᐅᕝᕙᓘᓐᓃᑦ ᓇᕿᓪᓗᒍ CTRL+C ᐊᒥᓱᓕᐅᕐᓗᒍ. CTRL+V ᐃᓕᓯᓂᐊᖅᑐᖅ ᐊᔪᕆᖅᑲᐅᔭᕐᓂᒃ ᕐᑯᓈᓄᑦ ᓱᓇᒃᑯᑖᖕᒍᔪᒧᑦ. ᓴᐅᒥᐊᓐᓇᕿᓪᓗᒍ Left-click ᐊᒻᒪᓗ ᓄᓪᓗᒍ ᓄᑖᕐᒧᑦ ᐊᓯᐊᓄᑦ ᐃᓂᒃᓴᖓᓄᑦ, ᐊᒻᒪᓗ ᑕᓕᖅᐱᐊᓐᓇᕿᓪᓗᒍ right-click ᓇᕿᓕᕐᒥᓗᒍ ᓂᕈᐊᖅᓯᒪᓂᖕᒋᑦ ᐲᕐᓂᐊᕐᒪᑕ ᐊᒻᒪᓗ ᐃᓕᔭᐅᓗᓂ. ᐊᒥᓱᐊᖅᑎᖅ ᑕᐃᒪᐃᓕᐅᕆᐊᖃᕈᕕᑦ ᑕᐃᒪᓐᓇᐃᓕᐅᖃᑦᑕᕐᓗᑎᑦ.

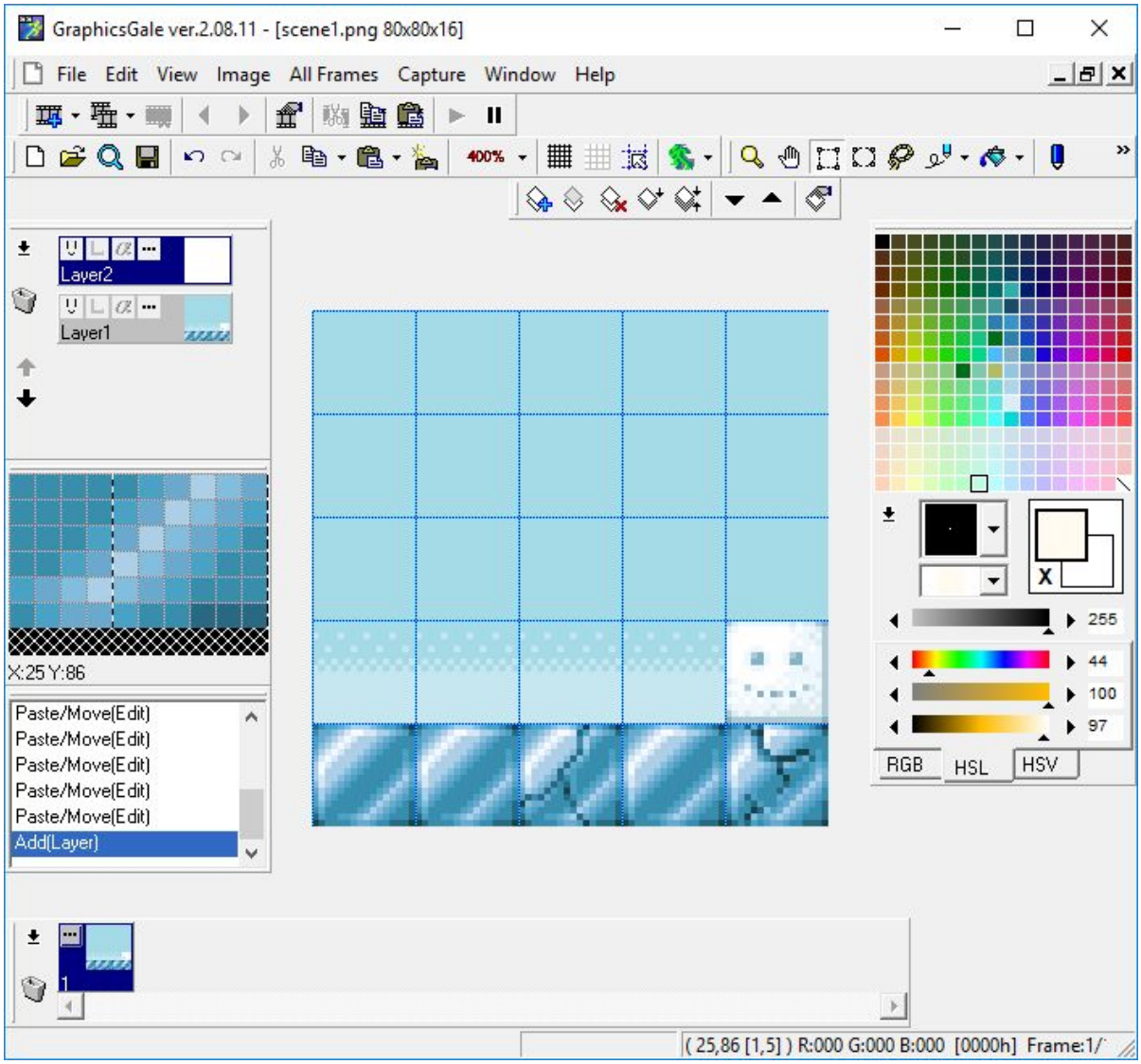



ᐊᑐᕐᓗᒍ ᐋᖅᑭᒋᐊᕈᑎᖓᓄᐊᓯᐊᓄᐊᖅᑕᐅᔾᔪᑎ Edit>Import ᐊᓯᖕᒋᑦ ᐃᓂᒃᓴᖕᒋᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖕᒋᑦ ᐱᖅᓯᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᖕᒋᑦ ᓴᖅᑭᓂᐊᕐᒪᑕ. ᐃᓚᔭᐅᓕᕋᔭᖅᑐᑦ ᑎᑎᖅᑐᒐᐅᔭᕐᕕᒃᓴᒧᑦ ᑕᐃᒫᒃᓴᐃᓐᓇᖅ ᕐᑯᓛᓂ ᑕᐃᒪᐃᓕᐅᖅᑲᐅᒐᕕᑦ, ᐊᒻᒪᓗ ᓂᕈᐊᕈᓐᓇᖅᑕᑎᑦ, ᐊᒥᓱᓕᐅᕐᓗᒋᑦ ᐊᒻᒪᓗ ᐃᓕᓗᒋᑦ ᑕᐃᒪᐃᒋᐊᖃᕈᕕᑦ. ᐱᖅᓯᐊᕈᑎᑉ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖕᒋᑕ ᓱᓇᒃᑯᑖᖕᒋᑦ ᐋᖅᑭᒃᓱᑐᐃᓐᓇᕐᓗᒋᑦ ᐱᔭᕇᕋᓱᐊᕐᓂᕐᓂ.

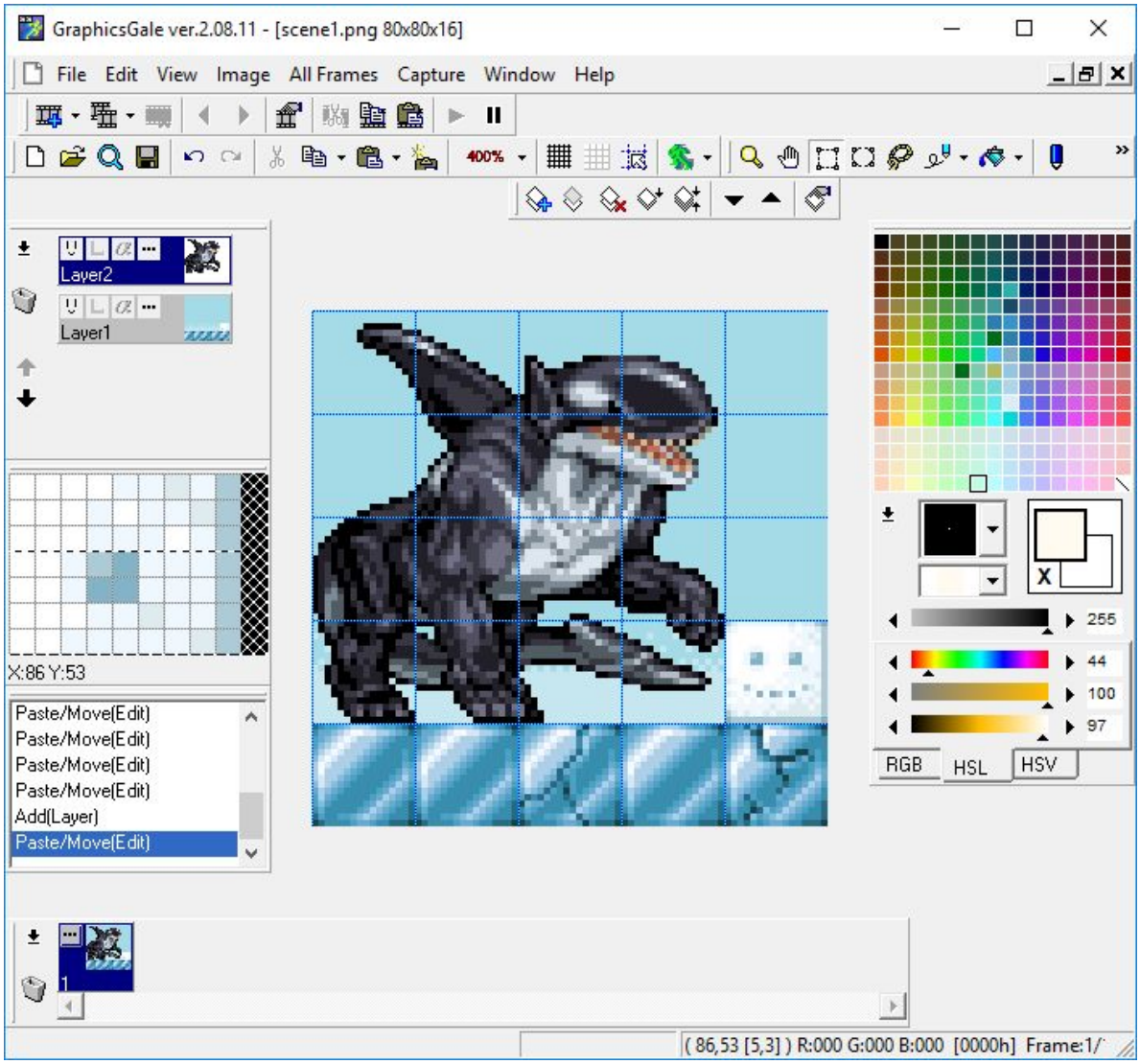



ᒫᓐᓇᓕ ᑕᐃᒪ ᓴᖅᑭᑎᓐᓂᐊᓕᕐᒥᔭᐃᑦ ᐆᒪᔪᖑᐊᑦ. ᓄᑲᓪᓚᒍᒪᖕᒋᓐᓇᑦᑎᒍᑦ ᓱᓇᒃᑯᑖᑦ ᐋᖅᑭᓱᖅᑕᐅᔭᕗᑦ, ᑕᐃᒪᐃᒻᒪᑦ ᐊᑐᕐᓂᐊᖅᑐᒍᑦ ᓄᑖᕐᒥᒃ ᖃᓕᓈᒍᑎᒥᒃ Layer. ᖃᓕᑏᒍᑎ ᓄᑖᖑᕗᖅ ᑎᑎᖅᑐᒐᐅᔭᕐᕕᒃᓴᖅ ᐊᔾᔨᖓᓂᒃ ᑎᑎᖅᑐᒐᐅᔭᖅᑲᐅᔭᕐᓂᒃ ᐱᑕᖃᖅᑐᓂ, ᖁᓛᓃᒍᓐᓇᖅᑐᖅ ᐊᓪᓕᕐᒥᓪᓗᓐᓃᑦ ᓱᓇᒃᑯᑖᓕᐊᓇᓱᒪᔭᕐᓂᒃ ᐊᔾᔨᖑᐊᓂᒃ. ᓇᕿᓪᓗᒍ ᖃᓕᓈᒍᑎᒃᑲᓐᓂᕐᒥᒃ ᐃᓚᓱᑎᕐᑎᒋᐊᕈᑎ ᖃᓕᓈᕐᑐᒥᒃ Add Layer ᓇᕿᑎᒐᖅ ᑕᐃᑲᓂ ᓂᕈᐊᕋᒃᓴᓂᒃ

ᐊᑐᕈᓐᓇᑕᕐᓂᒃ ᖃᕋᓴᐅᔭᒃᑯᑦ. ᑖᓐᓇ ᐃᓚᓱᓂᐊᖅᑐᖅ ᓄᑖᕐᒥᒃ ᖃᓕᓈᕐᑐᒥᒃ ᐊᔾᔨᖑᐊᕐᒧᑦ ᐊᒻᒪᓗ “ᖃᓕᓈᓐᓂᖓ 2” ᓴᖅᑭᓕᕋᔭᖅᑐᖅ ᑕᐃᑲᓂ ᐊᒥᐊᕐᕕᒋᖅᑲᐅᔭᕐᓂᒃ ᓴᐅᒥᐊᓃᕐᑐᓂᑦ.




ᐊᒥᐊᕐᕕᒋᔭᐃᑦ ᖃᓕᓈᑦᑐᖅ ᐊᒥᐊᕐᕕᒃ ᕿᕐᓂᓂᖅᓴᒥᒃ ᑐᖑᔪᖅᑑᒦᑉᐳᖅ ᖃᐅᔨᒃᑲᐃᒍᑎᖃᖅᑐᓂ ᐊᒥᐊᕐᒥᒃ, ᑕᐃᒃᑯᐊ ᐊᒥᐊᕐᕕᒋᙱᑕᑎᑦ ᖃᓕᓈᑦᑐᑦ ᓯᐊᕐᓇᐅᓪᓗᑎᑦ ᐊᒥᐊᖏᑦ. ᐊᑐᕐᓗᒋᑦ ᓇᕿᑎᒐᑦ ᓱᑯᑦᑎᐊᓅᖓᙳᐊᖅᑐᑦ ᖃᓕᓈᑦᑐᒥᒃ ᓅᕐᑯᓪᓗᒍ ᐊᒥᐊᓇᕕᒃᑲᓐᓂᖅ ᖃᓕᓈᓐᓂᖓ ᕐᑯᓛᓄᑦ ᐊᒻᒪᓗ ᐊᒻᒧᑦ, ᑭᓯᐊᓂᓕ ᒫᓐᓇ ᑖᓐᓇ ᖃᓕᓈᓐᓂᖓ ᓂᕈᐊᕋᑖᖅᑕᐃᑦ 2 ᕐᑯᓛᓃᕐᑯᕙᕗᑦ. ᑕᐃᑯᙳᖓᕐᓗᑎᑦ ᐋᖅᑭᒋᐊᕈᑎᖓᐳᐊᓯᐊᓄᐊᖅᑕᐅᔾᔪᑎ Edit>Import ᐊᒻᒪᓗ ᓇᓂᓗᒍ ᒪᑐᐃᕐᓗᒍᓗ ᐆᒪᔪᙳᐊᓕᐊᕆᖅᑲᐅᔭᐃᑦ ᐋᖅᑭᓯᖅᑐᒍ ᓯᕗᓂᐊᓂ ᐃᓕᓐᓂᐊᕈᑎᒥ (ᐃᓕᓐᓂᐊᕐᓂᙱᒃᑯᕕᐅᒃ ᐊᔾᔨᙳᐊᓕᐅᕈᑎᕋᓛᖅ ᑭᐸᓗᕆᑦᑐᒡᒍᑕᐅᓪᓗᑎᑦ 2 ᐃᓕᓐᓂᐊᕋᒃᓴᖅ, ᐋᖅᑮᒍᓐᓇᖅᑐᑎᑦ ᐊᒻᒪᓗ ᑐᖅᑯᕐᓗᒍ ᐆᒪᔪᙳᐊᖑᓂᐊᖅᑐᖅ, ᐅᕙᕙᔫᓐᓃᑦ ᑎᑎᖅᑐᒐᐅᔭᑦᑎᐊᒻᒪᕆᓪᓗᒍ ᑕᕙᕙᓂ ᖃᓕᓈᑦᑐᒥ ᐊᒥᐊᕐᕕᒃᓴᒥ).




ᐃᓕᓗᒍ ᐆᒪᔪᙳᐊᑦ ᓱᑯᑦᑎᐊᓃᑦᑯᒻᒪᖕᒑᖅᐱᐅᒃ ᐱᙳᐊᕈᑎᑉ ᐊᕙᑎᒋᓂᐊᖅᑕᖕᒐᓂᒃ, ᐊᒻᒪᓗ ᐊᑐᓕᕐᒥᓗᒍ ᐸᐃᑉᐹᑯᕕᒃᐳᑐᖅᑯᕐᓗᒍ ᐅᕗᖕᒐ File>Save As ᑐᖅᑯᕐᓂᐊᕋᕕᐅᒃ ᑕᒪᐃᓐᓂ ᐊᔾᔨᙳᐊᖅ ᐊᔾᔨᙳᐊᖑᒍᓐᓇᐅᑎᒥ ᐸᐃᑉᐹᑯᕕᐅᔪᒧᑦ PNG ᐸᐃᑉᐹᑯᕕᖕᒐᑕ ᑐᖅᑯᐃᕕᖕᒐᓄᑦ. ᐊᔾᔨᙳᐊᑦ ᐊᖏᑦᓕᒋᐊᕐᑯᒍᕕᐅᒃ ᑐᖅᑯᓚᐅᙱᓐᓂᕐᓂ, ᐅᕗᖕᒐᕐᓗᑎᑦ ᑕᒪᐃᓐᓂ ᐊᔾᔨᙳᐊᑦᐳᐆᑦᑐᓕᖅᑭᑦᑖᓗᒍ All Frames>Resample, ᓇᕿᒍᓐᓃᖅᑎᑦᓗᒍ “ᐊᒥᐊᖃᑦᑎᐊᓕᕐᓗᓂ” “Smooth” (ᐱᐅᓛᖑᕗᑦ ᓇᕿᑎᓯᒪᒍᓐᓃᖅᑏᓐᓇᖃᑦᑕᕈᕕᐅᒃ, ᐋᖅᑭᑦᓗᒍᓗ ᑕᐅᑐᒐᒃᓴᐅᓂᖕᒐᑕ ᐳᓴᓐᑎᖕᒐ ᐅᕗᖕᒐ 200%, ᐊᒻᒪᓗ ᓇᕿᑦᓗᒍ ᑕᐃᒪ OK. ᑐᖅᑯᕐᓗᒍ ᐃᒪᓐᓇ, Save As, ᐊᒻᒪᓗ ᕐᑯᕕᐊᑎᒍᒃ ᒥᑭᔪᖅ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᖏᑦ ᐱᙳᐊᕐᕕᐅᓂᐊᖅᑐᑉ ᐊᕙᑎᖕᒐ ᓴᓇᖅᑲᐅᔭᐃᑦ!

## ᐃᓱᓕᓐᓂᖓ

ᐃᓛᒃᑰᖓᔪᑦ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᑦ ᐱᐅᓪᓚᓇᑦᑐᑦ ᐃᓕᔭᐅᓗᑎᑦ ᐊᔾᔨᐅᙱᑦᑐᑦ ᐊᔾᔨᙳᐊᑦ ᑕᕝᕗᖓ ᐃᓂᒃᓴᖓᓄᑦ, ᓈᑕᐅᒍᓐᓇᖅᑐᓂᒃ ᓴᓇᓗᑎᑦ, ᓱᑯᑦᑎᐊᓃᓐᓂᓇᔭᖏᖕᓂᒃ, ᐊᒻᒪᓗ ᐊᓯᖏᖕᓂᒃ ᐊᒥᓱᑦ ᐱᙳᐊᖅᑕᐅᔪᑦ ᓱᓇᒃᑯᑖᓇᒐᔭᖅᑕᖏᓐᓂᑦ. ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᑦ tilesets ᓄᐊᑕᐅᓕᓲᑦ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᑦ ᐊᒥᓱᓄᑦ ᑐᖅᑯᖅᑕᐅᓕᓲᖕᒍᓪᓗᑎᑦ 100-ᖕᒍᓗᐊᖅᑐᓂᒃ ᐊᑐᓂ ᐸᐃᑉᐹᒃᑯᕕᓐᓈᖓᓗᑎᑦ ᐊᒻᒪᓗ ᐱᕐᑯᑎᓕᐊᓇᔭᐅᓯᒪᔪᑦ ᐸᐃᑉᐹᒃᑯᕕᑦ ᖃᑦᑏᓐᓇᐅᑎᑕᐅᓗᑎᑦ. ᐊᑐᕐᓗᓂ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᓂᒃ ᐊᒻᒪᓗ ᐊᑐᓂ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑕᖑᔪᒥᒃ ᑕᒪᒃᑮᒃ ᐊᑐᕋᒃᓴᐅᕗᒃ ᑲᒪᒋᔭᐅᓂᐊᕐᒪᑕ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᑦ ᐱᙳᐊᕈᑎᒥ, ᐊᒻᒪᓗ ᑭᐅᓂᐊᒍᑦ ᑐᙵᕕᖃᖅᑐᑎᑦ ᖃᕋᓴᐅᔭᕐᒧᑦ ᖃᓄᐃᑦᑑᓂᖓ ᐊᑐᖅᑕᐅᓂᖓᓂᒃ ᐊᒻᒪᓗ ᐊᑐᖃᑦᑕᕈᒪᓲᖓ ᐱᙳᐊᕈᑎᓕᐅᖅᑎᐅᔫᑉ.

## ᐃᑲᔫᑎᒃᓴᑦ

### ᐃᑲᔫᑎᒃᓴᒃᑲᓐᓃᑦ

- DYA ᐱᙳᐊᕈᑏᑦ – ᖃᓄᐃᑦᑑᓂᐊᕐᓂᖓ ᐊᕙᑎᖓᑕ ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᑦ ᐊᒥᓱᑦ ᐊᓂᒍᖅᐸᓪᓕᐊᑎᓪᓗᒍ (ᑕᑯᓂᐊᕐᕕᐅᑉ ᐊᖅᑯᑎᖓ: https://www.youtube.com/watch?v=3kPpfLmells
- ᒍᕋᐱᒃᓴᐃᔪᓪ GraphicsGale ᐃᖅᑲᓇᐃᔮᓇᔭᐅᓂᖏᑕ ᐃᓕᓐᓂᐊᑎᑦᑎᒍᑎ (ᑕᑯᓂᐊᕐᕕᐅᑉ ᐊᖅᑯᑎᖓ: https://www.youtube.com/watch?v=RNCsmqIR_vY)
- ᒪᑐᐃᖓᔪᑦᐱᙳᐊᕈᑎᓕᐅᕐᓗᓂᑎᑎᖅᑐᒐᐅᔭᖅᑕᐅᔪᓐᓇᖅᑐᑦ – ᐃᓂᒃᓴᖏᑦ ᖃᓄᐃᑦᑑᒐᔭᕐᓂᖏᑕ ᐱᙳᐊᕈᑎᒥ ᓱᓇᒃᑯᑖᑦ ᖃᓄᐃᑦᑐᕈᓗᔭᐅᓂᖏᑦ ( ᑕᑯᓂᐊᕐᕕᐅᑉ ᐊᖅᑯᑎᖓ: https://opengameart.org/content/chapter-8-a-world-of-tiles)

### ᖃᕋᓴᐅᔭᒃᑯᑦ ᐃᓈᖅᑎᑏᒍᓐᓇᐅᑏᑦ ᐃᑲᔫᑏᑦ

- ᑭᐸᓗᕐᑐᒡᒍᑎᕋᓛᖅᑎᖅᓱᖅᑕᐅᓂᖏᑦ (ᑕᑯᓂᐊᕐᕕᐅᑉ ᐊᖅᑯᑎᖓ: http://pixeljoint.com/)
- ᑭᐸᓗᕐᑐᒡᒍᑎᕋᓛᖅᑐᓴᓇᔭᐅᓂᖏᑦ (ᑕᑯᓂᐊᕐᕕᐅᑉ ᐊᖅᑯᑎᖓ: https://pixelation.org/)

- ᓇᐊᑎᕐᒥ – /ᐊᔾᔨᙳᐊᓕᐅᕈᑎᕋᓛᑦ ᑭᑉᐸᓗᑦᑐᒡᒍᑕᐅᓪᓗᑎᑦ ᓴᓇᔭᐅᓂᖏᑦ (ᑕᑯᓂᐊᕐᕕᐅᑉ ᐊᖅᑯᑎᖓ: https://www.reddit.com/r/pixelart)